09/359975
#19

WEST Search History

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☑	US5466676A	all	all	16	USPT,PGPB,JPAB,EPAB,DWPI
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Search Results - Record(s) 1 through 19 of 19 returned.

1. 20020161218 . 01 May 01. 31 Oct 02. Hepatitis C virus vaccine. Pachuk, Catherine J., et al. 536/23.7; C07H021/04 A61K048/00.

2. 20020009492 . 16 Feb 01. 24 Jan 02. Delivery systems using preformed biodegradable polymer compositions and methods. Truong, Myhanh T., et al. 424/484; 530/363 A61K009/14 C07K014/765.

3. 6468982 . 23 Jun 97; 22 Oct 02. Genetic immunization. Weiner; David B., et al. 514/44; 435/320.1 514/615 514/818 536/23.1. A61K048/00 A61K031/16 C12N015/74 C07H021/04.

4. 6448389 . 19 Jan 99; 10 Sep 02. Human cytomegalovirus DNA constructs and uses therefor. Gonczol; Eva, et al. 536/23.72; 424/230.1 435/320.1 435/69.1. C07H021/04.

5. 6429201 . 12 May 00; 06 Aug 02. Method for immunization against hepatitis B. Michel; Marie-Louise, et al. 514/44; 435/235.1 435/320.1. A61K048/00 C12N015/63 C12N007/00.

6. 6383512 . 04 Apr 00; 07 May 02. Vesicular complexes and methods of making and using the same. Ciccarelli; Richard B., et al. 424/450; 435/375 435/69.1 514/44. A61K009/127.

7. 6348449 . 16 Dec 94; 19 Feb 02. Methods of inducing mucosal immunity. Weiner; David B., et al. 514/44; 424/130.1 424/184.1 424/209.1 435/235.1 435/252.3 435/320.1 435/455 514/2 514/330. A01N043/04 A61K031/70.

8. 6248565 . 02 Feb 00; 19 Jun 01. Immunization with plasmid encoding immunogenic proteins and intracellular targeting sequences. Williams; William V., et al. 435/69.7; 424/185.1 424/192.1 514/44 530/350 536/23.4 536/23.5. C12P021/04 A61K039/00 A61K031/70 C07K001/00 C07H021/04.

9. 6235888 . 05 Jun 97; 22 May 01. Hepatitis C virus vaccine. Pachuk; Catherine J., et al. 536/23.72; 435/320.1 536/23.1 536/23.7. C07H021/04 C12N015/63.

10. 6228621 . 23 Oct 97; 08 May 01. Plasmids encoding immunogenic proteins and intracellular targeting sequences. Williams; William V., et al. 435/69.7; 424/185.1 424/192.1 514/44 530/350 536/23.4 536/23.5. C12P021/04 A61K039/00 A01N043/04 C07K001/00.

11. 6156319 . 31 Jul 97; 05 Dec 00. Soluble herpesvirus glycoprotein complex vaccine. Cohen; Gary H., et al. 424/196.11; 424/186.1 424/231.1 536/23.72. A61K039/245 C12M015/38.

12. 6133244 . 12 Feb 97; 17 Oct 00. Method for immunization against hepatitis B. Michel; Marie-Louise, et al. 514/44; 435/320.1. A61K048/00 C12N015/63.

13. 5981505 . 26 Nov 97; 09 Nov 99. Compositions and methods for delivery of genetic material. Weiner; David B., et al. 514/44; 424/278.1 514/615 514/818. A61K045/05 A61K048/00 A61K031/00.

14. 5858331 . 30 Dec 96; 12 Jan 99. Prilocaine and hydrofluorocarbon aerosol preparations. Henry; Richard A.. 424/45; 424/46 514/817 514/818 514/974. A61K009/12.

☐ 15. 5830876 . 30 May 95; 03 Nov 98. Genetic immunization. Weiner; David B., et al. 514/44; 424/278.1 514/615 514/818. A61K045/05 A61K048/00 A61K031/00.

☐ 16. 5817637 . 13 Jan 97; 06 Oct 98. Genetic immunization. Weiner; David B., et al. 514/44; 424/278.1 435/975 514/615 514/818. A61K045/05 A61K048/00 A61K031/00.

☐ 17. 5593972 . 21 Sep 93; 14 Jan 97. Genetic immunization. Weiner; David B., et al. 514/44; 424/278.1 514/615 514/818. A61K045/05 A61K048/00 A61K031/00.

☐ 18. WO 200232398 A2 US 20020150621 A1 . Pharmaceutical composition useful for prolonged delivery of agent e.g. drug comprises microparticles of agent encapsulated in matrix having lipid, protein and sugar. KOHANE, D S, et al. A61K009/00 A61K009/14.

☐ 19. WO 200210410 A1 AU 200184672 A . Delivering desired polypeptide to individual, by administering to individual vector comprising nucleic acid encoding the polypeptide, and glycoprotein D, its function fragment, or nucleic acid encoding glycoprotein D. SIN, J I, et al. A61K035/00 A61K039/00 A61K048/00 C12N015/63 C12N015/85.

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Search Results - Record(s) 151 through 187 of 187 returned.

151. 5853752 . 06 Jun 95; 29 Dec 98. Methods of preparing gas and gaseous precursor-filled microspheres. Unger; Evan C., et al. 424/450; 264/4.1 264/4.3 264/4.6 424/1.21 424/489 424/9.321 424/9.51 436/829. A61K009/127.

152. 5843913 . 07 Jun 96; 01 Dec 98. Nucleic acid respiratory syncytial virus vaccines. Li; Xiaomao, et al. 514/44; 435/320.1 435/91.4. A61K031/70 C12N015/64 C12N015/85.

153. 5837713 . 26 Feb 97; 17 Nov 98. Treatment of eosinophil-associated pathologies by administration of topical anesthetics and glucocorticoids. Gleich; Gerald J.. 514/312; 514/317 514/330 514/535 514/540 514/626 514/826 514/914. A01N043/40.

154. 5795909 . 22 May 96; 18 Aug 98. DHA-pharmaceutical agent conjugates of taxanes. Shashoua; Victor E., et al. 514/449; 514/549. A61K031/335 A61K031/22.

155. 5770222 . 07 Jun 95; 23 Jun 98. Therapeutic drug delivery systems. Unger; Evan C., et al. 424/450; 264/4.1 264/4.3 264/4.6 424/1.21 424/489 424/9.321 424/9.51 436/829. A61K009/127.

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157. 5733878 . 06 May 96; 31 Mar 98. Morphogen-induced periodontal tissue regeneration. Kuberasampath; Thangavel, et al. 514/12; 514/21 530/350. A61K038/18 A61K038/17 C07K014/51.

158. 5733572 . 29 Nov 94; 31 Mar 98. Gas and gaseous precursor filled microspheres as topical and subcutaneous delivery vehicles. Unger; Evan C., et al. 424/450; 424/1.21 424/489 424/9.321 424/9.4 436/829. A61K009/127.

159. 5715824 . 06 Jun 95; 10 Feb 98. Methods of preparing gas-filled liposomes. Unger; Evan C., et al. 424/9.51; 264/4.1. A61B008/00.

160. 5714165 . 01 Apr 92; 03 Feb 98. Bioadhesive polyethylene glycol ointment for medicaments. Repka; Michael A., et al. 424/486; 514/928 514/944 514/969. A61K009/06 A61K047/32 A61K047/34 A61K009/10.

161. 5714159 . 31 Oct 96; 03 Feb 98. Hydrogel-forming, self-solvating absorbable polyester copolymers, and methods for use thereof. Shalaby; Shalaby W.. 424/426; 424/425 424/457 424/462 424/486 424/78.03 424/78.06 514/506 525/439 525/450 528/272 528/275 528/354 528/361. A61F002/00.

162. 5696160 . 14 Oct 94; 09 Dec 97. Topical composition enhancing healing of viral lesions. Miller; Bruce W., et al. 514/513; 514/934. A61K031/21.

163. 5656593 . 15 Nov 93; 12 Aug 97. Morphogen induced periodontal tissue regeneration. Kuberasampath; Thangavel, et al. 514/12; 424/49 514/21 514/900 514/902. A61K038/18 A61K038/16

C07K014/475 C07K014/51.

☐ 164. 5654156 . 23 Jun 94; 05 Aug 97. Immunoassay using liposomes. Kubotsu; Kazuhisa, et al. 435/7.1; 435/184 435/962 436/821. G01N033/53.

☐ 165. 5618563 . 10 Sep 93; 08 Apr 97. Biodegradable polymer matrices for sustained delivery of local anesthetic agents. Berde; Charles B., et al. 424/501; 424/499 514/818. A61K009/16.

☐ 166. 5612052 . 13 Apr 95; 18 Mar 97. Hydrogel-forming, self-solvating absorbable polyester copolymers, and methods for use thereof. Shalaby; Shalaby W.. 424/426; 424/425 424/457 424/462 424/486 424/78.03 424/78.06 514/506 525/439 525/450 528/272 528/275 528/354 528/361. A61F002/00.

☐ 167. 5587175 . 28 Dec 93; 24 Dec 96. Medical uses of in situ formed gels. Viegas; Tacey X., et al. 424/427; 424/430 424/436 424/486 424/488 424/497 424/78.02 424/78.17 424/78.18 424/78.26 424/78.37 514/772.7 514/779 514/912 514/913 514/914 514/944 514/966 514/967 523/122 623/5.11 623/905. A61K031/77 A61K031/725 A61K031/73 A61K002/14.

☐ 168. 5585112 . 30 Nov 93; 17 Dec 96. Method of preparing gas and gaseous precursor-filled microspheres. Unger; Evan C., et al. 424/450; 264/4.1 264/4.3 424/9.51. A61K009/127.

☐ 169. 5580575 . 11 Jun 93; 03 Dec 96. Therapeutic drug delivery systems. Unger; Evan C., et al. 424/450;. A61K009/127.

☐ 170. 5542935 . 30 Nov 93; 06 Aug 96. Therapeutic delivery systems related applications. Unger; Evan C., et al. 604/190; 424/450 600/458. A61M005/00 A61B008/00 A61K009/127.

☐ 171. 5534492 . 03 Jan 95; 09 Jul 96. Muramyl peptide for the treatment of toxicity. Aston; Roger, et al. 514/8; 260/998.2 514/17 514/18 514/19 514/810 514/811 514/812 514/813. A61K037/02.

☐ 172. 5469854 . 11 Jun 93; 28 Nov 95. Methods of preparing gas-filled liposomes. Unger; Evan C., et al. 600/458; 264/4.3. A61B008/00 A61K009/66.

☑ 173. 5466676 . 23 Jan 92; 14 Nov 95. Satellite cell proliferation in adult skeletal muscle. Booth; Frank W., et al. 514/44;. C12N015/00.

☐ 174. 5407834 . 27 Apr 92; 18 Apr 95. Phencyclidine and phencyclidine metabolites assay, tracers, immunogens, antibodies and reagent kit. Dubler; Robert E., et al. 436/537; 424/141.1 435/345 436/536 436/548 436/816 530/388.9 530/389.8. G01N033/542 G01N033/577 C12N005/20 C07K015/28.

☐ 175. 5380754 . 04 Dec 92; 10 Jan 95. Topical composition enhancing healing of viral lesions. Miller; Bruce W., et al. 514/513; 514/934. A61K031/21.

☐ 176. 5322689 . 10 Mar 92; 21 Jun 94. Topical aromatic releasing compositions. Hughes; Timothy J., et al. 424/401; 514/692 514/724 514/728 514/772.6 514/853 514/931 514/938. A61K009/107 A61K031/045 A61K031/125 A61K047/12.

☐ 177. 5318780 . 30 Oct 91; 07 Jun 94. Medical uses of in situ formed gels. Viegas; Tacey X., et al. 424/427; 424/430 424/436 424/486 424/488 424/497 424/78.02 424/78.17 424/78.18 424/78.26 424/78.37 514/772.7 514/779 514/912 514/913 514/914 514/944 514/966 514/967 523/122. A61K031/77

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☐ 178. 5223285 . 31 Mar 92; 29 Jun 93. Nutritional product for pulmonary patients. DeMichele; Stephen J., et al. 426/72; 426/73 426/800 426/801 514/904. A23L001/303.

☐ 179. 5155212 . 29 May 90; 13 Oct 92. Phencyclidine and phencyclidine metabolites assay, tracers, immunogens, antibodies and reagent kit. Dubler; Robert E., et al. 530/380; 530/362 530/363 530/367 530/386 530/395 530/404 530/405 530/408 530/409 530/807. C07K015/14 C07K015/16 C07K017/06.

☐ 180. 5147294 . 01 Oct 90; 15 Sep 92. Therapeutic method for reducing chronic pain in a living subject. Smith; Ivor S., et al. 604/500; 128/898 604/20 604/501. A61M031/00.

☐ 181. 5077033 . 07 Aug 90; 31 Dec 91. Ophthalmic drug delivery with thermo-irreversible gels of polxoxyalkylene polymer and ionic polysaccharide. Viegas; Tacey X., et al. 514/668; 424/78.04 514/716 514/912 514/913 514/914 528/419. A61K047/34 A61K047/36 A61K047/02.

☐ 182. 4904260 . 25 Jul 88; 27 Feb 90. Prosthetic disc containing therapeutic material. Ray; Charles D., et al. 623/17.12; 424/424 424/DIG.7 604/131 604/891.1. A61F002/44 A61M031/00.

☐ 183. 4557934 . 21 Jun 83; 10 Dec 85. Penetrating topical pharmaceutical compositions containing 1-dodecyl-azacycloheptan-2-one. Cooper; Eugene R.. 514/159; 424/449 424/601 514/165 514/223.5 514/224.2 514/224.5 514/226.8 514/231.2 514/233.2 514/236.2 514/270 514/374 514/399 514/635 514/947. A01N059/26 A61K033/42.

☐ 184. 4537776 . 21 Jun 83; 27 Aug 85. Penetrating topical pharmaceutical compositions containing N-(2-hydroxyethyl) pyrrolidone. Cooper; Eugene R.. 514/424; 514/171 514/300 514/549 514/825 514/826 514/859. A01N043/36 A61K031/40.

☐ 185. EP 643964 A2 US 6140371 A CA 2130291 A EP 643964 A3 . New uses for local anaesthetics - protects plasma cell membranes, reduces tumour size, also acts as an antidote to prevent intoxication, modulates immune function, etc.. ELICABE, R L, et al. A61K031/16 A61K031/245 A61K031/445 A61K031/47.

☐ 186. ES 2170074 T3 WO 9405265 A1 AU 9351269 A EP 659073 A1 JP 08503695 W AU 683022 B JP 3007687 B2 CA 2144407 C EP 1132080 A2 EP 659073 B1 DE 69331387 E . Sustained release of local anaesthetic - comprises biodegradable polymer matrix, giving prolonged pain relief without inflammation. BERDE, C B, et al. A61K009/00 A61K009/16 A61K009/20 A61K009/22 A61K009/50 A61K009/70 A61K031/165 A61K031/245 A61K031/445 A61K031/47 A61K047/30 A61K047/34 A61P025/02.

☑ 187. WO 9112329 A AU 9173128 A US 5466676 A WO 9112329 A3 . Satellite cell proliferation in adult skeletal muscle - for treating e.g. muscular dystrophy, diabetes and albinism. BOOTH, F W, et al. A61K048/00 C12N015/00 C12N015/86.

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30. Document ID: US 5661127 A

L10: Entry 30 of 86

File: USPT

Aug 26, 1997

US-PAT-NO: 5661127
DOCUMENT-IDENTIFIER: US 5661127 A
TITLE: Peptide compositions with growth factor-like activity
DATE-ISSUED: August 26, 1997

US-CL-CURRENT: 514/16; 530/329

APPL-NO: 8/ 431954
DATE FILED: May 1, 1995

IN: Bhatnagar; Rajendra S., Qian; Jing Jing

AB: A peptide has been synthesized with the sequence ANVAENA (SEQ ID NO:1). This peptide, designated "cytomodulin," is able to mimic a broad range of activities of TGF-.beta.1 in various cell types. Compositions for applications such as tissue repair are provided that comprise a biocompatible matrix having cytomodulin admixed with or carried by the matrix.

31. Document ID: US 5646014 A

L10: Entry 31 of 86

File: USPT

Jul 8, 1997

US-PAT-NO: 5646014
DOCUMENT-IDENTIFIER: US 5646014 A
TITLE: Peptide, antibacterial agent, peptide gene, recombinant DNA and method for preparing the peptide
DATE-ISSUED: July 8, 1997

US-CL-CURRENT: 435/69.1; 530/324, 536/22.1

APPL-NO: 8/ 520599
DATE FILED: August 29, 1995

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
JP	6-207342	August 31, 1994
JP	7-125440	May 24, 1995

IN: Hara; Seiichi

AB: The present invention relates to a peptide represented by the amino acid sequence of SEQ ID NO: 1, an antibacterial agent comprising the peptide as an active ingredient, a peptide gene encoding the peptide, a recombinant DNA comprising the peptide gene and a method for producing a peptide., The peptide of the present invention exhibits an effective antibacterial activity against various Gram-negative and -positive bacteria including Staphylococcus aureus and Bacillus cereus which are pathogenic bacteria causing food poisoning. Therefore, this peptide is useful as a food preservative and an antibacterial agent for medical use.

32. Document ID: US 5643783 A

L10: Entry 32 of 86

File: USPT

Jul 1, 1997

US-PAT-NO: 5643783
DOCUMENT-IDENTIFIER: US 5643783 A
TITLE: Collagen and uses therefor
DATE-ISSUED: July 1, 1997

US-CL-CURRENT: 435/325; 435/252.3, 435/320.1, 435/365, 435/69.1, 530/356, 536/22.1, 536/23.1, 536/23.5

APPL-NO: 8/ 159784
DATE FILED: December 1, 1993

IN: Olsen; Bjorn R., Oh; Suk P.

AB: The invention features a novel collagen, type .alpha.1 (XVIII) collagen, and uses therefor.

33. Document ID: US 5635482 A

L10: Entry 33 of 86

File: USPT

Jun 3, 1997

US-PAT-NO: 5635482
DOCUMENT-IDENTIFIER: US 5635482 A
TITLE: Synthetic compounds and compositions with enhanced cell binding
DATE-ISSUED: June 3, 1997

US-CL-CURRENT: 514/14; 424/422, 424/423, 514/15, 514/16, 514/17, 514/18, 514/19, 530/345

APPL-NO: 8/ 278878
DATE FILED: July 22, 1994

PARENT-CASE:
This is a continuation-in-part of Ser. No. 07/804,782, filed Dec. 9, 1991, now U.S. Pat. No. 5,354,736, which was a continuation-in-part of Ser. No. 07/393,621, filed Aug. 14, 1989 and now abandoned.

IN: Bhatnagar; Rajendra S.

AB: Compositions of the invention include composites comprising a

biomaterial having
compounds thereon with enhanced cell binding with respect to collagen. These composites are
useful for soft and hard tissue repair or reconstruction and for in vitro uses. Suitable
compounds with enhanced cell binding include synthetic peptides that mimic the conformation
necessary for recognition and docking of collagen binding species (such as cell surface
receptors for collagen and fibronectin) and have the amino acid residues -Ile-Ala- folded in
a .beta.-bend.

34. Document ID: US 5629191 A

L10: Entry 34 of 86

File: USPT

May 13, 1997

US-PAT-NO: 5629191
DOCUMENT-IDENTIFIER: US 5629191 A
TITLE: Method of making a porous matrix particle
DATE-ISSUED: May 13, 1997

US-CL-CURRENT: 435/395; 424/484, 424/488, 435/174, 435/70.3

APPL-NO: 8/ 074922
DATE FILED: June 10, 1993

PARENT-CASE:
BACKGROUND OF THE INVENTION This application is a continuation-in-part of U.S. Ser. No. 682,645,
filed Apr. 9, 1991, now abandoned, which is a continuation-in-part of U.S. Ser. No. 203,580,
filed May 27, 1988, now abandoned, which in turn is a continuation of U.S. Ser. No. 688,630,
filed Jan. 3, 1985, now abandoned; the contents of each are hereby incorporated by reference.

IN: Cahn; Frederick

AB: A porous particle having a generally isopycnic density with liquid growth medium,
a sponge-like character and a diameter of less than 2 mm which is formed from a homogenous
biologically compatible matrix is described. This particle is useful in various systems for
culturing anchorage-dependent and -independent cells, and is adaptable to large scale tissue
culture which permits harvesting of cell products. The method of making such a particle
includes preparing a solution containing a biologically compatible material, forming
droplets from the solution, freezing the droplets, drying the droplets by sublimation to
form a particle, and crosslinking the biologically compatible material in the particle.

35. Document ID: US 5625033 A

L10: Entry 35 of 86

File: USPT

Apr 29, 1997

US-PAT-NO: 5625033
DOCUMENT-IDENTIFIER: US 5625033 A
TITLE: Totally synthetic affinity reagents
DATE-ISSUED: April 29, 1997

US-CL-CURRENT: 530/324; 435/252.3, 435/320.1, 435/69.1, 435/69.7, 435/7.1, 435/7.2, 530/300,
530/350, 536/23.1, 536/23.5

APPL-NO: 8/ 471052
DATE FILED: June 6, 1995

PARENT-CASE:
This application is a divisional of application Ser. No. 08/176,500, filed Dec. 30, 1993, now
U.S. Pat. No. 5,498,538 which is a continuation of application Ser. No. 08/013,416 filed Feb. 1,
1993, now abandoned, which is a continuation-in-part of application Ser. No. 07/854,133 filed
Mar. 19, 1992, now abandoned, which in turn is a continuation of application Ser. No. 07/480,420
filed Feb. 15, 1990, now abandoned, the entire disclosures of which are incorporated herein by
reference.

IN: Kay; Brian K., Fowlkes; Dana M.

AB: A novel method for producing novel and/or improved heterofunctional binding
fusion proteins termed Totally Synthetic Affinity Reagents (TSARs) is disclosed. TSARs are
concatenated heterofunctional proteins, polypeptides or peptides comprising at least two
functional regions: a binding domain with affinity for a ligand and a second effector
peptide portion that is chemically or biologically active. In one embodiment, the
heterofunctional proteins, polypeptides or peptides further comprise a linker peptide
portion between the binding domain and the second active peptide portion. The linker peptide
can be either susceptible or not susceptible to cleavage by enzymatic or chemical means.
Novel and/or improved heterofunctional binding reagents as well as methods for using the
reagents for a variety of in vitro and in vivo applications are also disclosed.

36. Document ID: US 5558988 A

L10: Entry 36 of 86

File: USPT

Sep 24, 1996

US-PAT-NO: 5558988
DOCUMENT-IDENTIFIER: US 5558988 A
TITLE: Primers and methods for detecting mutations in the procollagen II gene that indicate a
genetic predisposition for osteoarthritis
DATE-ISSUED: September 24, 1996

US-CL-CURRENT: 435/6; 435/91.2, 536/24.31, 536/24.33

APPL-NO: 7/ 977284
DATE FILED: November 13, 1992

IN: Prockop; Darwin J., Ala-Kokko; Leena, Ritvaniemi; Pertti

AB: The invention provides probes and primers for amplifying certain regions of genes for structural proteins of cartilage and methods for detecting mutations in these genes isolated from the nucleic acid of cells suspected of exhibiting mutant structural protein gene expression or having mutant structural protein genes. The invention also provides methods for determining a genetic predisposition for a disease that alters the structure or function of cartilage because of a mutation in a gene for a structural protein of cartilage in a mammal.

37. Document ID: US 5541295 A

L10: Entry 37 of 86

File: USPT

Jul 30, 1996

US-PAT-NO: 5541295
DOCUMENT-IDENTIFIER: US 5541295 A
TITLE: Detection of type II collagen and its peptides
DATE-ISSUED: July 30, 1996

US-CL-CURRENT: 530/388.1; 435/7.93, 435/7.94, 435/70.21, 435/961, 436/531, 436/548, 530/391.1, 530/391.3

APPL-NO: 8/ 017518
DATE FILED: February 12, 1993

IN: Barrach; Hans-Jurgen, Chichester; Clinton O.

AB: The invention discloses monoclonal antibodies which bind specifically to Type II collagen, but not to its peptides, or vice versa. Also disclosed are the methods of preparing hybridomas for production of these antibodies; the assays which utilize these antibodies to detect or quantify Type II collagen and/or its peptides in a solution (e.g., body fluid, culture medium, and tissue extract); and assay kits containing these antibodies.

38. Document ID: US 5498538 A

L10: Entry 38 of 86

File: USPT

Mar 12, 1996

US-PAT-NO: 5498538
DOCUMENT-IDENTIFIER: US 5498538 A
TITLE: Totally synthetic affinity reagents
DATE-ISSUED: March 12, 1996

US-CL-CURRENT: 435/69.1; 435/6, 435/69.7, 435/DIG.3, 435/DIG.4, 536/23.4

APPL-NO: 8/ 176500
DATE FILED: December 30, 1993

PARENT-CASE:
This application is a continuation of application Ser. No. 08/013,416 filed Feb. 1, 1993, now abandoned, which in turn is a continuation-in-part of application Ser. No. 07/854,133 filed Mar. 19, 1992, now abandoned, which in turn is a continuation of application Ser. No. 07/480,420 filed Feb. 15, 1990, now abandoned, the entire disclosures of which are incorporated herein by reference.

IN: Kay; Brian K., Fowlkes; Dana M.

AB: A novel method for producing novel and/or improved heterofunctional binding fusion proteins termed Totally Synthetic Affinity Reagents (TSARs) is disclosed. TSARs are concatenated heterofunctional proteins, polypeptides or peptides comprising at least two functional regions: a binding domain with affinity for a ligand and a second effector peptide portion that is chemically or biologically active. In one embodiment, the heterofunctional proteins, polypeptides or peptides further comprise a linker peptide portion between the binding domain and the second active peptide portion. The linker peptide can be either susceptible or not susceptible to cleavage by enzymatic or chemical means.
Novel and/or improved heterofunctional binding reagents as well as methods for using the reagents for a variety of in vitro and in vivo applications are also disclosed.

39. Document ID: US 5455164 A

L10: Entry 39 of 86

File: USPT

Oct 3, 1995

US-PAT-NO: 5455164
DOCUMENT-IDENTIFIER: US 5455164 A
TITLE: Ruminant immortalized mammary epithelial cell lines
DATE-ISSUED: October 3, 1995

US-CL-CURRENT: 435/6; 435/325, 435/69.1, 435/948

DISCLAIMER DATE: 20100713
APPL-NO: 8/ 056028
DATE FILED: April 30, 1993

PARENT-CASE:
This application is a continuation-in-part application of application Ser. No. 431,294 filed on Nov. 3, 1989, now U.S. Pat. No. 5,227,301, issued Jul. 13, 1993.

IN: Turner; Jeffrey D.

AB: The present invention relates to a ruminant immortalized mammary epithelial cell line which has normal physiological responses in that it produces milk constituents which comprises .alpha. and .beta.-casein and lactose. There is provided, using the cell line of the present invention a method in vitro studying lactation. There is

provided a method of in
vitro screening for gene expression of DNA constructs for transgenic ruminant animals. The
cell line can be further used in a method for expressing foreign genes. One cell line of the
present invention has been deposited at the ATCC under the accession number CRL10274.

40. Document ID: US 5449678 A

L10: Entry 40 of 86

File: USPT

Sep 12, 1995

US-PAT-NO: 5449678
DOCUMENT-IDENTIFIER: US 5449678 A
TITLE: Anti-fibrotic quinazolinone-containing compositions and methods for the use thereof
DATE-ISSUED: September 12, 1995

US-CL-CURRENT: 514/259

APPL-NO: 8/ 181066
DATE FILED: January 14, 1994

IN: Pines; Mark, Nagler; Arnon, Slavin; Shimon

AB: The invention provides an anti-fibrotic composition, comprising an amount a
compound of formula I: ##STR1## wherein: n=1 or 2, effective to inhibit collagen type I
synthesis as active ingredient therein., R.sub.1 is a member of the group consisting of
hydrogen, halogen, nitro, benzo, lower alkyl, phenyl and lower alkoxy;, R.sub.2 is a member
of the group consisting of hydroxy, acetoxy, and lower alkoxy, and, R.sub.3 is a member of
the group consisting of hydrogen and lower alkenoxy-carbonyl;

41. Document ID: US 5354736 A

L10: Entry 41 of 86

File: USPT

Oct 11, 1994

US-PAT-NO: 5354736
DOCUMENT-IDENTIFIER: US 5354736 A
TITLE: Synthetic compounds and compositions with enhanced cell binding
DATE-ISSUED: October 11, 1994

US-CL-CURRENT: 514/14; 514/15, 514/16, 514/17, 530/326, 530/327, 530/328, 530/329, 530/330

APPL-NO: 7/ 804782
DATE FILED: December 9, 1991

PARENT-CASE:
This is a continuation-in-part of Ser. No. 07/393,621, filed Aug. 14, 1989, now abandoned.

IN: Bhatnagar; Rajendra S.

AB: Compositions of the invention include composites comprising a biomaterial
carrying compounds with enhanced cell binding with respect to collagen. These composites are
useful for soft and hard tissue repair or reconstruction. Suitable compounds with enhanced
cell binding include synthetic peptides that mimic the conformation necessary for
recognition and docketing of collagen binding species (such as cell surface receptors for
collagen and fibronectin). Hydrogel matrices as the biomaterial promote cell attachment to
the matrix and cell migration into the matrix.

42. Document ID: US 5278285 A

L10: Entry 42 of 86

File: USPT

Jan 11, 1994

US-PAT-NO: 5278285
DOCUMENT-IDENTIFIER: US 5278285 A
TITLE: Variant of Kunitz-type inhibitor derived from the .alpha.3-chain of human type VI collagen
produced by recombinant DNA technology
DATE-ISSUED: January 11, 1994

US-CL-CURRENT: 530/324; 435/69.2, 930/250

APPL-NO: 7/ 473295
DATE FILED: February 1, 1990

IN: Ebbers; Juergen, Hoerlein; Dietrich, Timpl; Ruppert, Chu; Mon-Li

AB: Kunitz-type inhibitor derived from the .alpha.3-chain of human type VI collagen
produced by recombinant DNA technology, variants thereof, process, expression vector and
recombinant host therefore and pharmaceutical use thereof are disclosed.

43. Document ID: US 5258043 A

L10: Entry 43 of 86

File: USPT

Nov 2, 1993

US-PAT-NO: 5258043
DOCUMENT-IDENTIFIER: US 5258043 A
TITLE: Method for making a prosthetic intervertebral disc
DATE-ISSUED: November 2, 1993

US-CL-CURRENT: 264/108; 128/898, 623/17.16, 623/901, 623/911

APPL-NO: 7/ 813984
DATE FILED: December 26, 1991

PARENT-CASE:
This is a divisional application of application Ser. No. 520,027, filed May 7, 1990 (now U.S.

Pat. No. 5,108,438), which is a continuation-in-part of application Ser. No. 317,951, filed Mar. 2, 1989 (now U.S. Pat. No. 5,007,934), which is a continuation-in-part of application Ser. No. 075,352, filed Jul. 20, 1987 (now U.S. Pat. No. 4,880,429).

IN: Stone; Kevin R.

AB: A prosthetic intervertebral disc is disclosed which can be implanted in the human skeleton, and which can act as a scaffold for regrowth of intervertebral disc material. The disc includes a dry, porous, volume matrix of biocompatible and bioresorbable fibers which may be interspersed with glyscosaminoglycan molecules. The matrix is adapted to have in vivo an outer surface contour substantially the same as that of a natural intervertebral disc, whereby the matrix establishes an at least partially bioresorbable scaffold adapted for ingrowth of intervertebral fibrochondrocytes. Cross-links may be provided by a portion of the GAG molecules.

44. Document ID: US 5227301 A

L10: Entry 44 of 86

File: USPT

Jul 13, 1993

US-PAT-NO: 5227301
DOCUMENT-IDENTIFIER: US 5227301 A
TITLE: Immortalized bovine mannary epithelial cell line
DATE-ISSUED: July 13, 1993

US-CL-CURRENT: 435/6; 435/325, 435/465, 435/948

APPL-NO: 7/ 431294
DATE FILED: November 3, 1989

IN: Turner; Jeffrey D., Huynh; Hung

AB: The present invention relates to a bovine immortalized mammary epithelial cell line which has normal physiological responses in that it produces milk constituents which comprises .alpha.- and .beta.-casein and lactose. There is provided, using the cell line of the present invention a method of `in vitro` studying lactation. There is provided a method of `in vitro` screening for gene expression of DNA constructs for transgenic cows, since the cell line of the present invention is a bovine one. The cell line can be further used in a method for indefinitely expressing foreign genes. The cell line of the present invention has been deposited at the ATCC under the accession number CRL 10274.

45. Document ID: US 5211657 A

L10: Entry 45 of 86

File: USPT

May 18, 1993

US-PAT-NO: 5211657
DOCUMENT-IDENTIFIER: US 5211657 A
TITLE: Laminin a chain deduced amino acid sequence, expression vectors and active synthetic peptides
DATE-ISSUED: May 18, 1993

US-CL-CURRENT: 623/1.48; 514/13, 514/14, 514/15, 530/326, 530/327

APPL-NO: 7/ 267564
DATE FILED: November 7, 1988

IN: Yamada; Yoshihiko, Sasaki; Makoto, Kleinman; Hynda K., Martin; George R.

AB: The present invention relates to peptides and derivatives thereof having laminin-like activity. The invention further relates to pharmaceutical compositions containing these peptides, to antibodies effective against these peptides, and to vectors containing a DNA sequence of cDNA coding for the A chain of laminin. The peptides of the invention may be used to treat diseases such as cancer.

46. Document ID: US 5108438 A

L10: Entry 46 of 86

File: USPT

Apr 28, 1992

US-PAT-NO: 5108438
DOCUMENT-IDENTIFIER: US 5108438 A
TITLE: Prosthetic intervertebral disc
DATE-ISSUED: April 28, 1992

US-CL-CURRENT: 623/17.16

APPL-NO: 7/ 520027
DATE FILED: May 7, 1990

PARENT-CASE:
CROSS-REFERENCE TO RELATED APPLICATION This application is a continuation-in-part applicant's copending U.S. Patent Application serial no 317,951, now U.S. Pat. No. 5,007,934, entitled "PROSTHETIC MENISCUS", filed Mar. 2, 1989, which is a continuation-in-part of U.S. Patent Application Ser. No. 075,352, entitled "PROSTHETIC MENISCUS", filed July 20, 1987, now U.S. Pat. No. 4,880,429. U.S. Patent Application Ser. No. 317,951 is incorporated herein by reference.

IN: Stone; Kevin R.

AB: A prosthetic intervertebral disc is disclosed which can be implanted in the human skeleton, and which can act as a scaffold for regrowth of intervertebral disc material. The disc includes a dry, porous, volume matrix of biocompatible and bioresorbable fibers which may be interspersed with glyscosaminoglycan molecules. The matrix is adapted to have in vivo an outer surface contour substantially the same as that of a natural

intervertebral disc,
whereby said matrix establishes an at least partially bioresorbable scaffold adapted for
ingrowth of intervertebral fibrochondrocytes. Cross-links may be provided by a portion of
the GAG molecules.

47. Document ID: US 5089406 A

L10: Entry 47 of 86

File: USPT

Feb 18, 1992

US-PAT-NO: 5089406
DOCUMENT-IDENTIFIER: US 5089406 A
TITLE: Method of producing a gene cassette coding for polypeptides with repeating amino acid
sequences
DATE-ISSUED: February 18, 1992

US-CL-CURRENT: 435/91.41; 435/69.1, 435/91.52, 435/91.53, 530/353, 530/356

APPL-NO: 7/476112
DATE FILED: January 29, 1990

PARENT-CASE:
This application is a continuation of application Ser. No. 001,292, filed Jan. 7, 1987, now
abandoned.

IN: Williams; Jon I., Salerno; Anthony J., Goldberg; Ina, McAllister; William T.

AB: This invention relates to processes for the microbial production of peptide
oligomers, to polypeptide products resulting from application of any of these processes, and
to microbes for use in such production. Another aspect of this invention relates to
processes for genetically engineering such microbes and to plasmid vectors for use in such
engineering.

48. Document ID: US 5015577 A

L10: Entry 48 of 86

File: USPT

May 14, 1991

US-PAT-NO: 5015577
DOCUMENT-IDENTIFIER: US 5015577 A
TITLE: DNA encoding hyaluronate synthase
DATE-ISSUED: May 14, 1991

US-CL-CURRENT: 435/101; 435/193, 435/252.3, 435/252.33, 435/320.1, 435/849, 435/885, 536/23.2,
536/23.7

APPL-NO: 7/401316
DATE FILED: August 29, 1989

IN: Weigel; Paul H., Papaconstantinou; John

AB: Disclosed are DNA segments encoding hyaluronic acid synthase which are employed
to construct recombinant cells useful in the production of hyaluronate synthase or
hyaluronic acid (HA). In preferred aspects, chromosomal DNA from Streptococcus equisimilis
is partially digested with EcoRI and the resultant fragments are ligated to form recombinant
vectors. These vectors are useful in the transformation of host cells such as E. coli or
Streptococcal hosts. Resultant transformants are screened by novel screening assays to
identify colonies which have incorporated HA synthase DNA in a form that is being actively
transcribed into the corresponding HA synthase enzyme. These colonies may be selected and
employed in the production of the enzyme itself or its product, HA.

49. Document ID: US 4675284 A

L10: Entry 49 of 86

File: USPT

Jun 23, 1987

US-PAT-NO: 4675284
DOCUMENT-IDENTIFIER: US 4675284 A
TITLE: Process and apparatus for evaluating liver disease
DATE-ISSUED: June 23, 1987

US-CL-CURRENT: 435/6; 435/1.1, 435/284.1, 435/40.52, 436/63, 600/562, 600/565

APPL-NO: 6/643294
DATE FILED: August 22, 1984

IN: Leevy; Carroll M., McNeil; Gloria, Habba; Saad

AB: There is disclosed an improved process and apparatus for treating liver biopsies
wherein tritiated proline and tritiated thymidine are forced through respective liver
biopsies, and thereafter the respective liver biopsies are evaluated for collagen synthesis
and DNA synthesis, respectively, utilizing autoradiographic techniques.

50. Document ID: JP 11338090 A

L10: Entry 50 of 86

File: JPAB

Dec 10, 1999

PUB-NO: JP411338090A
DOCUMENT-IDENTIFIER: JP 11338090 A
TITLE: SILVER HALIDE EMULSION HAVING RECOMBINANT COLLAGEN SUITABLE FOR PHOTOGRAPHIC USE AND ITS PREPARATION

PUBN-DATE: December 10, 1999

INT-CL (IPC): G03C 1/047; A61K 38/17; C07K 5/04; C07K 14/78; C12N 1/19; C12N 1/21; C12N 15/09; G03C 1/015; G03C 1/035

APPL-NO: JP10378430
APPL-DATE: December 24, 1998

IN: VAN, HEERDE GEORGE VALENTINO, VAN, RIJN ALEXIS CORNELUS, BOUWSTRA, JAN BASTIAAN, DE, WOLF FREDERIK ANTON, MOOIBROEK, ANDREAS, WERTEN, MARC WILLEM THEODOOR, WIND, RICHELE DEODATA, VAN, DEN BOSCH TANJA JACOBA

AB: PROBLEM TO BE SOLVED: To provide a low-cost high quality gelatin to be used for the production of a silver halide emulsion by using a recombination DNA technique., SOLUTION: This silver halide emulsion and the preparation of the AgX emulsion have the following features. The emulsion is a planer silver halide emulsion in which planer particles possess >75% of the projected area of the whole particles. The emulsion contains silver halide particles which are produced as nuclei in the presence of a nuclear forming peptizer and grown in the presence of a growing peptizer. The peptizer is a substantially pure collagen material prepared by genetic engineering, and the peptizer has an amino acid sequence having more than four different amino acids. By the producing method of the recombinant collagen polypeptide, the expression of the nucleic acid sequence which codes collagen polypeptide is obtd. by microorganisms to a degree over 0.95 g/l, the recombinant collagen has no helical structure, and the expression is obtd. in microorganisms except for Escherichia coli or saccharomyces cerevisiae., COPYRIGHT: (C)1999,JPO

51. Document ID: JP 11332585 A

L10: Entry 51 of 86 File: JPAB Dec 7, 1999

PUB-NO: JP411332585A
DOCUMENT-IDENTIFIER: JP 11332585 A
TITLE: NEW METHOD FOR PRODUCING GELATIN, WHOLE LENGTH TRIPLE-HELIX COLLAGEN WD RECOMBINANT CELL

PUBN-DATE: December 7, 1999

INT-CL (IPC): C12N 15/09; C07K 14/78; C12N 1/19; C12N 1/21; C12N 5/10; C12P 21/02

APPL-NO: JP11126492
APPL-DATE: May 6, 1999

IN: DAVID, R OLSEN, RONALD, A HITZEMAN, GEORGE, E CHISHOLM IV

AB: PROBLEM TO BE SOLVED: To obtain the subject collagen useful for e.g. biocompatible materials by culturing recombinant host cells containing a DNA encoding a fibrillar collagen monomer devoid of C propeptide SSAD under conditions appropriate for expressing the DNA., SOLUTION: This fibrillar collagen is obtained, without the need of any after-treatment, by culturing recombinant host cells such as yeast cells transferred with a recombinant DNA including a DNA encoding a fibrillar collagen monomer devoid of at least 50% of C propeptide SSAD under conditions appropriate for expressing the DNA. This fibrillar collagen is useful as e.g. a component of biocompatible materials for use in base materials for in vitro cell culture in the biological investigation, artificial organ implants, sustained medicament release matrices, artificial skin, bandage matrices for wounds and therapeutic matrices for wounds., COPYRIGHT: (C)1999,JPO

52. Document ID: JP 11308995 A

L10: Entry 52 of 86 File: JPAB Nov 9, 1999

PUB-NO: JP411308995A
DOCUMENT-IDENTIFIER: JP 11308995 A
TITLE: NEW PROTEINS C16N-1 AND C16N-2, AND GENES CODING FOR THESE

PUBN-DATE: November 9, 1999

INT-CL (IPC): C12N 15/09; A01K 67/027; A61K 31/70; A61K 35/76; A61K 38/00; A61K 38/00; A61K 38/00; A61K 38/00; C07K 14/47; C07K 14/48; C07K 16/18; C12N 5/10; C12P 21/02

APPL-NO: JP10134440
APPL-DATE: April 28, 1998

IN: ISHIZUKA, YASUYUKI, MOCHIZUKI, REIKO

AB: PROBLEM TO BE SOLVED: To obtain new genes which consists of DNA coding for proteins having specific amino acid sequences, have an activity of inducing differentiation from a myeloid cell to a cell having an ability of degrading hydroxyapatite and so on, and can be used, for example, for preparing an animal model for osteoporosis., SOLUTION: These are new DNA coding for new proteins C16N-1 and C16N-2 having amino acid sequences shown, for example, by formulas I and II which have an activity of inducing differentiation from a myeloid cell to a cell having an ability of degrading hydroxyapatite, an activity of keeping viability of nerve cells, an activity of suppressing growth of osteoblasts, an activity of enhancing expression of collagen type I in osteoblast, and so on, and are useful to prepare a transgenic animal useful as an animal model for developing medicines for hypertension and osteoporosis, and as an animal for screening the medicines and so on. This DNA is obtained by screening cDNA libraries from human brain, hippocampus, and testis using a part of DNA of C16N as a probe or a PCR primer., COPYRIGHT: (C)1999,JPO

53. Document ID: JP 11196875 A

L10: Entry 53 of 86

File: JPAB

Jul 27, 1999

PUB-NO: JP411196875A
DOCUMENT-IDENTIFIER: JP 11196875 A
TITLE: PROMOTER DNA FOR HYALURONIC ACID SYNTHASE

PUBN-DATE: July 27, 1999

INT-CL (IPC): C12N 15/09; C12N 9/00; C12Q 1/68

APPL-NO: JP10006191
APPL-DATE: January 14, 1998

IN: YAMADA, YOICHI, ITANO, NAOKI, KIMATA, HIROHARU

AB: PROBLEM TO BE SOLVED: To obtain from mouse genome DNA the subject DNA including the promoter region of hyaluronic acid synthase HAS 1 and useful for, e.g. gene therapy and gene diagnosis of disorders involving abnormal expression and decreased biosynthesis of hyaluronic acid., SOLUTION: This promoter DNA is a DNA having a base sequence of the formula or a part thereof having promoter activity (This promoter DNA includes a DNA hybridizable therewith under stringent conditions and also having promoter activity.). This promoter DNA can be obtained, as a 5'-upstream region of the gene for hyaluronic acid synthase, from the mouse genome DNA library through hybridization using the cDNA for mouse HAS 1 as a probe., COPYRIGHT: (C)1999,JPO

54. Document ID: JP 09224674 A

L10: Entry 54 of 86

File: JPAB

Sep 2, 1997

PUB-NO: JP409224674A
DOCUMENT-IDENTIFIER: JP 09224674 A
TITLE: POLYPEPTIDE OF NEW HYALURONIC ACID-SYNTHETIC ENZYME AND DNA CODING THE SAME

PUBN-DATE: September 2, 1997

INT-CL (IPC): C12N 15/09; C07H 21/04; C07K 14/47; C12N 9/00; A61K 48/00; C12N 1/21

APPL-NO: JP08038336
APPL-DATE: February 26, 1996

IN: ITANO, NAOKI, KIMATA, HIROHARU

AB: PROBLEM TO BE SOLVED: To obtain a new DNA coding a polypeptide of a hyaluronic acid- synthetic enzyme having a specific amino acid sequence, derived from an eucaryote, especially a mouse and useful for a gene thereby of a disease caused from depression of hyaluronic acid manifestation., SOLUTION: This new DNA codes a polypeptide of a hyaluronic acid- synthetic enzyme having an amino acid sequence expressed by the formula, derived from an eucaryote, especially a mouse, etc., and is useful for curing containing a gene therapy of a disease of mammals caused from depression of hyaluronic acid manifestation, or a gene therapy for suppressing of cancer transfer using or development, etc., of a specific inhibitor of hyaluronic acid synthetic enzyme by using an anti-sense DNA or RNA, etc. The new DNA is obtained by culturing a mouse breast cancer strain cell FM3AJCRB0701, etc., collecting its mRNA with a normal method, producing a cDNA library by using the mRNA, selecting a clone containing a DNA coding a hyaluronic acid synthetic enzyme by screening the cDNA and recovering the DNA., COPYRIGHT: (C)1997,JPO

55. Document ID: JP 08023979 A

L10: Entry 55 of 86

File: JPAB

Jan 30, 1996

PUB-NO: JP408023979A
DOCUMENT-IDENTIFIER: JP 08023979 A
TITLE: HUMAN COLLAGEN EXPRESSION VECTOR AND PRODUCTION OF HUMAN COLLAGEN

PUBN-DATE: January 30, 1996

INT-CL (IPC): C12N 15/09; C12P 21/02; C12N 5/10

APPL-NO: JP06164433
APPL-DATE: July 15, 1994

IN: KITAJIMA, TAKASHI, TOMITA, MASAHIRO, PIITAA, ROISU, KATO, TOSHIYASU

AB: PURPOSE: To obtain a new vector having a virus DNA infective to insect cell enabling hydroxylation of proline residue in collagen molecule and human collagen cDNA and capable of producing human collagen in a host in high efficiency., CONSTITUTION: This new expression vector capable of imparting a host with human collagen productivity contains a virus DNA infective to an insect cell enabling hydroxylation of proline residue in a collagen molecule and a human collagen cDNA digestible with bacteria collagenase, composed of triple chain molecule consisting of associated three polypeptide chains, having a pepsin-resistant polypeptide fragment in the molecule and free from covalent crosslinking structure between the three chain molecules. The expression vector is produced by separating a human collagen cDNA from a cDNA library originated from human placenta and bonding the cDNA with a baculovirus DNA to construct a recombinant plasmid., COPYRIGHT: (C)1996,JPO

56. Document ID: JP 06105687 A

L10: Entry 56 of 86

File: JPAB

Apr 19, 1994

PUB-NO: JP406105687A
DOCUMENT-IDENTIFIER: JP 06105687 A
TITLE: HUMAN COLLAGEN V GENE

PUBN-DATE: April 19, 1994

INT-CL (IPC): C12N 15/12; C07K 13/00; C07K 15/20; C12Q 1/68

APPL-NO: JP03358300
APPL-DATE: December 27, 1991

IN: TAKAHARA, KAZUHIKO, SATO, YOSHIKO, OKAZAWA, KAZUHIDE, OKAMOTO, NOBUKO, NODA, AKIHIRO, YAOI, YOSHITO, KATOU, IKUNOSHIN

AB: PURPOSE: To determine the human collagen V gene and provide its base sequence.,
CONSTITUTION: The human collagen V gene having a DNA sequence expressed by the sequence No.1 in the sequence table. The length of the base sequence is 5,676. It has 8 cysteine units, can form a homo-type triple chain and exhibits codon usage different from that of the other fibrous collagen. It can be applied to the gene diagnosis of diseases relating to human collagen V gene. Since the gene is producible on an industrial scale, it is utilizable for the production of a bio-relating substance., COPYRIGHT: (C)1994,JPO&Japio

57. Document ID: WO 9817320 A1

L10: Entry 57 of 86

File: EPAB

Apr 30, 1998

PUB-NO: WO009817320A1
DOCUMENT-IDENTIFIER: WO 9817320 A1
TITLE: TITLE DATA NOT AVAILABLE

PUBN-DATE: April 30, 1998

IN: No data.

AB: A method of treating a human suffering a disease or condition caused by a gene, cDNA or RNA-DNA oligonucleotide or RNA-DAN oligonucleotide hybrids or messenger RNA implicated in a disease or condition involving cells that express hyaluronic acid receptors is provided, the method comprising administering to such human, an effective dosage amount of a pharmaceutical composition comprising an effective amount of a form of hyaluronic acid selected from hyaluronic acid and/or a pharmaceutically acceptable salt thereof associated with/bound with an effective amount of anti-sense to the gene, cDNA or RNA-DNA oligonocleotide or RNA-DNA oligonucleotide hybrids or messenger RNA implicated in the disease or condition in a suitable pharmaceutically acceptable diluent.

58. Document ID: WO 9708311 A1

L10: Entry 58 of 86

File: EPAB

Mar 6, 1997

PUB-NO: WO009708311A1
DOCUMENT-IDENTIFIER: WO 9708311 A1
TITLE: NOVEL PROCOLLAGENS

PUBN-DATE: March 6, 1997

INT-CL (IPC): C12N 15/12; C12N 15/62; C07K 14/78; A01K 67/027; A61K 38/39; G01N 33/68; A23L 1/305; A61L 27/00; D06M 15/15; C12C 5/02; G03C 1/047
EUR-CL (EPC): C07K014/78

APPL-NO: GB09602122
APPL-DATE: August 30, 1996
PRIORITY-DATA: GB09517773A (August 31, 1995)

IN: BULLEID, NEIL, KADLER, KARL

AB: There is disclosed molecules comprising at least a first moiety having the activity of a procollagen C-propeptide and a second moiety selected from any one of the group of an alien collagen alpha -chain and non-collagen materials, the first moiety being attached to the second moiety. Also disclosed are collagen molecules, fibrils and fibres comprising a non-natural combination of collagen alpha -chains, DNA encoding same, expression hosts transformed or transfected with same, transgenic animals and methods of producing a non-natural collagen.

59. Document ID: US 5278285 A

L10: Entry 59 of 86

File: EPAB

Jan 11, 1994

PUB-NO: US005278285A
DOCUMENT-IDENTIFIER: US 5278285 A
TITLE: Variant of Kunitz-type inhibitor derived from the alpha 3-chain of human type VI collagen produced by recombinant DNA technology

PUBN-DATE: January 11, 1994

INT-CL (IPC): A61K 37/02
EUR-CL (EPC): C07K014/78; C07K014/81

APPL-NO: US47329590
APPL-DATE: February 1, 1990
PRIORITY-DATA: US47329590A (February 1, 1990)

IN: EBBERS, JUERGEN, HOERLEIN, DIETRICH, TIMPL, RUPPERT, CHU, MON-LI

AB: Kunitz-type inhibitor derived from the alpha 3-chain of human type VI collagen
produced by recombinant DNA technology, variants thereof, process, expression vector and
recombinant host therefore and pharmaceutical use thereof are disclosed.

60. Document ID: WO 9400463 A2

L10: Entry 60 of 86

File: EPAB

Jan 6, 1994

PUB-NO: WO009400463A2
DOCUMENT-IDENTIFIER: WO 9400463 A2
TITLE: DNA ENCODING HYALURONIC ACID SYNTHASE (HAS), EXPRESSION VECTORS CONTAINING THIS GENE, AND PRODUCTION OF HYALURONIC ACID BY TRANSEFORMED MICROORGANISMS AND IN VITRO

PUBN-DATE: January 6, 1994

INT-CL (IPC): C07H 0/
EUR-CL (EPC): C12N009/10

APPL-NO: EP09301575
APPL-DATE: June 21, 1993
PRIORITY-DATA: ITPD920110A (June 19, 1992)

IN: PREHM, PETER, O'REGAN, MICHAEL, CALLEGARO, LANFRANCO, LELLIG, SABINE

AB: An isolated DNA fragment comprising a nucleotide sequence encoding hyaluronic
acid synthase is provided. Also provided are recombinant expression vectors comprising this
sequence, capable of expressing hyaluronic acid synthase in prokaryotic and eukaryotic
cells, as well as host cells harboring such expression vectors. Such cells are capable of
producing hyaluronic acid synthase, hyaluronic acid, or both, which can be recovered from
these cells, the culture medium, or both. Also provided are a method of producing hyaluronic
acid synthase, methods of producing hyaluronic acid both in vivo and in vitro, and
hyaluronic acid produced by these methods. In the case of in vitro production, the molecular
weight of hyaluronic acid can be varied by varying the time of incubation of hyaluronic acid
precursors in the presence of hyaluronic acid synthase and/or the reaction conditions.
Lastly, a method of purifying hyaluronic acid synthase from cultured cells is also provided.

61. Document ID: WO 9300357 A1

L10: Entry 61 of 86

File: EPAB

Jan 7, 1993

PUB-NO: WO009300357A1
DOCUMENT-IDENTIFIER: WO 9300357 A1
TITLE: THERAPEUTIC POLYPEPTIDES BASED ON VON WILLEBRAND FACTOR

PUBN-DATE: January 7, 1993

INT-CL (IPC): C07H 15/12; C07H 17/00; C07K 3/08; C07K 7/00; C07K 13/00; C12N 5/00; C12N 15/00;
C12P 21/06
EUR-CL (EPC): C07K014/755

APPL-NO: US09205472
APPL-DATE: June 29, 1992
PRIORITY-DATA: US72058891A (June 28, 1991)

IN: CHANG, MICHAEL N, MCGARRY, DANIEL G, REGAN, JOHN R, RUGGERI, ZAVERIO M, WARE,
JERRY L

AB: A polypeptide patterned on a fragment of wild type mature von Willebrand factor
(vWF) subunit having one or more binding sites of predetermined affinity for one or more of
the ligands selected from the group consisting of collagen, glycosaminoglycans,
proteoglycans, platelet glycoprotein Ib alpha , platelet glycoprotein IIb/IIIa, or
coagulation factor VIII, said polypeptide having a modified amino acid sequence relative to
that of said fragment and an increased binding affinity, relative to said predetermined
affinity, for one or more of said ligands, including also such a polypeptide prepared by
mutagenesis of a DNA sequence and patterned on wild type mature vWF subunit, and also a
polypeptide in purified form patterned upon a parent polypeptide which comprises the wild
type amino acid sequence of mature von Willebrand factor subunit, or a fragment thereof, and
including also purified DNA sequences encoding such polypeptides, expression plasmids and
viral expression vectors containing the DNA sequences, and therapeutic compositions
comprising such polypeptides effective in the treatment of thrombosis, and methods for the
use thereof, and also preparation of such polypeptides by mutagenesis of an encoding DNA
sequence or covalent modification of wild type vWF.

62. Document ID: WO 9217192 A1

L10: Entry 62 of 86

File: EPAB

Oct 15, 1992

PUB-NO: WO009217192A1
DOCUMENT-IDENTIFIER: WO 9217192 A1
TITLE: THERAPEUTIC FRAGMENTS OF VON WILLEBRAND FACTOR

PUBN-DATE: October 15, 1992

INT-CL (IPC): A61K 37/00; C07H 15/12; C07K 13/00; C12N 5/00; C12N 15/00; C12N 15/09; C12N 15/12
EUR-CL (EPC): C07K014/755; C07K016/36

APPL-NO: US09202475
APPL-DATE: March 27, 1992
PRIORITY-DATA: US67552991A (March 27, 1991)

IN: RUGGERI, ZAVERIO M, WARE, JERRY L

AB: A polypeptide patterned on a fragment of wild type mature von Willebrand factor
(vWF) subunit having one ore more binding sites of predetermined affinity for one or more of
the ligands selected from the group consisting of collagen, glycosaminoglycans,
proteoglycans, platelet glycoprotein Ib alpha , platelet glycoprotein IIb/IIIa, or
coagulation factor VIII, said polypeptide having a modified amino acid sequence relative to
that of said fragment and an increased binding affinity, relative to said predetermined
affinity, for one or more of said ligands, including also such a polypeptide prepared by
mutagenesis of a DNA sequence and patterned on wild type mature vWF subunit, and also a
polypeptide in purified form patterned upon a parent polypeptide which comprises the wild
type amino acid sequence of mature von Willebrand factor subunit, or a fragment thereof, and
including also purified DNA sequences encoding such polypeptides, expression plasmids and
viral expression vectors containing the DNA sequences, and therapeutic compositions
comprising such polypeptides effective in the treatment of thrombosis, and methods for the
use thereof, and also preparation of such polypeptides by mutagenesis of an encoding DNA
sequence or covalent modification of wild type vWF.

63. Document ID: CA 2269148 A1, EP 967226 A2, AU 9926934 A, JP 11332585 A
L10: Entry 63 of 86
File: DWPI
Nov 8, 1999

DERWENT-ACC-NO: 2000-074666
DERWENT-WEEK: 200016

TITLE: New method for production of fibrillar collagen, useful for preparing telopeptide collagen
fibrils and gelatin

PRIORITY-DATA:
1999US-0289578
April 10, 1999
1998US-0084828
May 8, 1998

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
CA 2269148 A1	November 8, 1999	E	000	C12N015/12
EP 967226 A2	December 29, 1999	E	030	C07K014/78
AU 9926934 A	November 18, 1999	N/A	000	C12N015/12
JP 11332585 A	December 7, 1999	N/A	036	C12N015/09

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	APPL-DESCRIPTOR
CA 2269148A1	April 23, 1999	1999CA-2269148	N/A
EP 967226A2	May 4, 1999	1999EP-0303470	N/A
AU 9926934A	May 4, 1999	1999AU-0026934	N/A
JP 11332585A	May 6, 1999	1999JP-0126492	N/A

INT-CL (IPC): C07K 14/78; C07K 19/00; C12N 1/19; C12N 1/21; C12N 5/10; C12N 15/09; C12N 15/12;
C12P 21/00; C12P 21/02

IN: CHISHOLM, G E, HITZEMAN, R A, OLSEN, D R

AB: NOVELTY - A method (A) for the production of fibrillar collagen (I) is new and
comprises:, (a) culturing a recombinant host cell (II) comprising a DNA (III) encoding a
fibrillar collagen monomer lacking a C propeptide SSAD (sequence selection and alignment
domain) (IV); and, (b) producing (I)., DETAILED DESCRIPTION - INDEPENDENT CLAIMS are
included for the following:, (1) a method (B) for the production of fibrillar procollagen,
comprising:, (a) culturing a recombinant yeast host cell comprising a DNA encoding a
fibrillar collagen monomer lacking a N propeptide (V); and, (b) producing (I);, (2) a mature
fibrillar telopeptide collagen, which lacks native glycosylation and has genuine amino and
carboxy terminal ends;, (3) a mature fibrillar telopeptide collagen produced by expression
of a DNA construct encoding a fibrillar collagen monomer (IV) and (V);, (4) a recombinant
host cell (VI), comprising an expression construct comprising DNA

encoding a fibrillar
collagen monomer lacking (IV); and, (5) a method (C) for producing telopeptide collagen
fibrils (VII)., USE - Methods (A) and (B) are used to produce fibrillar collagen, from which
telopeptide collagen fibrils can be derived (claimed). (VI), comprising DNA encoding a
collagen monomer lacking (IV) or (V) is used to produce gelatin (claimed). Collagen is used
in biological research as a substrate for in vitro cell culture and as a component of
biocompatible materials for use in prosthetic implants, sustained drug release matrices,
artificail skin and wound dressing and healing devices. Gelatin is particularly useful for
foodstuffs and medicine, for coating tablets and making capsules., ADVANTAGE - Prior art
methods of preparing collagen have involved isolating it from natural sources such as bovine
hide and rats tails, but the new methods produce species matched collagen, which is more
desirable in order to minimize the potential for immune response to the collagen. The
methods are also shorter and less expensive than prior art methods, such as recombinant
collagen production using transgenic animals. The methods, comprising the use of collagen
monomers lacking the N and/or C propeptides, result in a large increase in the production of
type I collagen.

64. Document ID: JP 11308995 A
L10: Entry 64 of 86
File: DWPI
Nov 9, 1999

DERWENT-ACC-NO: 2000-046933
DERWENT-WEEK: 200007

TITLE: New proteins C16N-1 and C16N-2 or a gene coding them - can have activity limited to
specific tissue or site

PRIORITY-DATA:
1998JP-0134440
April 28, 1998

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 11308995 A	November 9, 1999	N/A	030	C12N015/09

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	APPL-DESCRIPTOR
JP 11308995A	April 28, 1998	1998JP-0134440	

N/A

INT-CL (IPC): A01K 67/027; A61K 31/70; A61K 35/76; A61K 38/00; C07K 14/47; C07K 14/48; C07K
16/18; C12N 5/10; C12N 15/09 ; C12P 21/02; C12N 5/10; C12R 1/91; C12P 21/02; C12R 1/91

IN: No data.

AB: A DNA coding a protein consisting of the amino acid sequence of Seq. No. 2, 4, 6
or 8., Also claimed are a DNA hybridizing with the above DNA under a stringent condition and
coding a non-secreting type protein having the features (1), (2), (3) and/or (4): (1) It has
a differentiation inducing activity from a myeloid cell to a cell having hydroxyapatite
decomposing activity. (2) It has an activity of maintaining the survival of neuron. (3) It
has an activity of inhibiting growth of osteoblast. (4) It has an activity of promoting
expression of type I collagen in osteoblast,a DNA consisting of an amino acid sequence in
which at least one amino acid is deleted, replaced and/or added in the amino acid sequence
of Seq. No. 2, 4, 6 or 8 and coding a non-secreting type protein having the above features
(1), (2), (3) and/or (4), a protein prepd. by expressing the above DNA, an expression vector
contg. the above DNA, a transformant transformed by the above expression vector, a method
for the prepn. of a recombinant protein in which the above transformant is cultured and the
expressed recombinant protein is recovered, a drug contg. the above DNA or the above protein
as the active component, an antibody against the above protein, and a transgenic animal in
which the above DNA is introduced artificially to the chromosome or it is deleted from the
chromosome., ADVANTAGE - The activity of the proteins can be limited to a specific tissue or
a specific site.

65. Document ID: US 5973120 A
L10: Entry 65 of 86
File: DWPI
Oct 26, 1999

DERWENT-ACC-NO: 1999-610317
DERWENT-WEEK: 200008

TITLE: Isolated alpha 3 chain of type IV collagen polypeptide useful for diagnosis and treatment
of Goodpasture syndrome

PRIORITY-DATA:
1990US-0621091
November 30, 1990
1995US-0399889
March 7, 1995

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES

MAIN-IPC

US 5973120 A
October 26, 1999
N/A
027
C07K014/47

APPLICATION-DATA:
PUB-NO
APPL-DATE
APPL-NO
APPL-DESCRIPTOR
US 5973120A
November 30, 1990
1990US-0621091
Div ex
US 5973120A
March 7, 1995
1995US-0399889
N/A
US 5973120A
N/A
US 5424408
Div ex

INT-CL (IPC): C07K 14/47

IN: HUDSON, B G, MORRISON, K E, REEDERS, S T

AB: NOVELTY - An isolated recombinant bovine alpha 3 chain of type IV collagen
polypeptide with amino acid sequence (I) produced by the expression of nucleic acid sequence
(II) in a transformed host cell is new., DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also
included for:, (1) an isolated recombinant human alpha 3 chain of type IV collagen
polypeptide with amino acid sequence (III) produced by the expression of nucleic acid
sequence (IV) in a transformed host cell; and, (2) an isolated recombinant polypeptide with
no more than 218 amino acids of (III) containing the amino acid sequence ISRCQVCMKKRH
produced by the expression of nucleic acid sequence (IV) in a transformed host cell.,
ACTIVITY - Nephrotrophic., MECHANISM OF ACTION - The polypeptides neutralize Goodpasture
(GP) antibodies in the blood., USE - The polypeptides are useful for detecting Goodpasture
antibodies in blood or tissue from a human patient and for treating Goodpasture syndrome.
The polypeptides can also be used in further analysis of Goodpasture syndrome, ADVANTAGE -
This method will provide a more accurate diagnosis of Goodpasture syndrome than a crude
collagenase digest of glomerular basement molecule.

66. Document ID: US 5965787 A
L10: Entry 66 of 86
File: DWPI
Oct 12, 1999

DERWENT-ACC-NO: 1999-579949
DERWENT-WEEK: 199949
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TITLE: Transgenic mouse useful for identifying and testing agents for the prevention and
treatment of rhematoid arthritis in humans

PRIORITY-DATA:
1995US-0521871
August 31, 1995

PATENT-FAMILY:
PUB-NO
PUB-DATE
LANGUAGE
PAGES
MAIN-IPC
US 5965787 A
October 12, 1999
N/A
028
C12N015/63

APPLICATION-DATA:
PUB-NO
APPL-DATE
APPL-NO
APPL-DESCRIPTOR
US 5965787A
August 31, 1995
1995US-0521871
N/A

INT-CL (IPC): C12N 5/10; C12N 15/09; C12N 15/63

IN: DAVID, C S, LUTHRA, H S, ZANELLI, E

AB: NOVELTY - A transgenic mouse lacking functional H-2 class II molecules and
susceptible to collagen induced arthritis, is new., DETAILED DESCRIPTION - The transgenic
mouse lacks functional H-2 class II molecules and is susceptible to collagen induced
arthritis, the somatic and germ cells contain a transgene comprising genomic DNA that
encodes a human leukocyte antigen (HLA)-DQ allele associated with susceptibility to
rheumatoid arthritis, where the allele is expressed on the cell surface., INDEPENDENT CLAIMS
are also included for the following:, (1) a method of identifying peptides potentially
effective for prevention or treatment of rheumatoid arthritis, comprising:, (a) providing a
transgenic mouse lacking functional H-2 class II molecules;, (b) administering a test
peptide to the transgenic mouse;, (c) exposing lymph node cells taken from the transgenic
mouse to the test peptide in vitro; and, (d) identifying whether the test peptide induces a
proliferative response in the lymph node cells; and, (2) a method of identifying peptides
potentially effective for prevention or treatment of rheumatoid arthritis, comprising:, (a)
providing a transgenic mouse lacking functional H-2 class I molecules;, (b) providing a
control group of transgenic mice;, (c) administering collagen to the test and control
group;, (d) administering a test peptide to the test group; and, (e) identifying the peptide
as potentially effective for prevention or treatment of rheumatoid arthritis if the test
group exhibit reduced susceptibility to collagen-induced arthritis compared to the control
group., USE - The transgenic mouse is useful for identifying and testing agents for the
prevention and treatment of rheumatoid arthritis in humans.

67. Document ID: US 5962648 A
L10: Entry 67 of 86
File: DWPI
Oct 5, 1999

DERWENT-ACC-NO: 1999-579627
DERWENT-WEEK: 199949

TITLE: Production of human recombinant collagen

PRIORITY-DATA:
1994US-0183648
January 18, 1994
1993US-0011643
January 28, 1993
1995US-0473465
June 7, 1995

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 5962648 A	October 5, 1999	N/A	008	A61K038/17

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	APPL-DESCRIPTOR
US 5962648A	January 28, 1993	1993US-0011643	CIP of
US 5962648A	January 18, 1994	1994US-0183648	Div ex
US 5962648A	June 7, 1995	1995US-0473465	N/A
US 5962648A	N/A	US 5667839	Div ex

INT-CL (IPC): A61K 38/17; C12N 5/00; C12N 15/00

IN: BERG, R A

AB: NOVELTY - Recombinant production of a single type of human collagen and/or procollagen using an expression system is new., DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a composition comprising only a single type of trimeric human procollagen and/or collagen prepared by recovering procollagen and/or collagen from the milk of a transgenic animal which comprises an expression system containing a nucleotide sequence encoding a human procollagen polypeptide chain (I) operably linked to a control nucleic acid sequence that effects expression specifically in milk protein-secreting epithelial cells of a mammary gland in the mammal, the cells express the coding nucleotide sequence to produce (I) and secrete the procollagen and/or collagen comprising (I) in the milk without extracellular aggregation of the procollagen and/or collagen which would prevent excretion from the mammal., USE - For the production of recombinant procollagen and/or collagen in mammalian milk., ADVANTAGE - Recombinant human collagen of a given type can be produced in a form which is free from coexpressed collagens or procollagens of alternative types. Previous methods for producing human collagen of a given type always provided collagen contaminated by the presence of alternative type collagens.

68. Document ID: JP 11338090 A, EP 926543 A1, NL 1007908 C2
L10: Entry 68 of 86
File: DWPI
Dec 10, 1999

DERWENT-ACC-NO: 1999-349297
DERWENT-WEEK: 200009

TITLE: New tabular silver halide emulsion, useful for production of components for photographic products

PRIORITY-DATA:
1997NL-1007908
December 24, 1997

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 11338090 A	December 10, 1999	N/A	118	G03C001/047
EP 926543 A1	June 30, 1999	E	045	G03C001/005
NL 1007908 C2	June 25, 1999	N/A	000	G03C001/005

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	APPL-DESCRIPTOR
JP 11338090A	December 24, 1998	1998JP-0378430	N/A
EP 926543A1			

December 15, 1998
1998EP-0204263
N/A
NL 1007908C2
December 24, 1997
1997NL-1007908
N/A

INT-CL (IPC): A61K 38/17; C07K 5/04; C07K 14/78; C12N 1/19; C12N 1/21; C12N 15/09; C12N 15/12;
C12N 15/74; C12P 21/00; G03C 1/005; G03C 1/015; G03C 1/035; G03C 1/047; C12N 1/21; C12R 1/78;
C12N 1/21; C12R 1/885; C12N 1/21; C12R 1/66; C12N 1/21; C12R 1/84

IN: BOUWSTRA, J B, DE WOLF, F A, MOOIBROEK, A, VAN DEN BOSCH, T J, VAN HEERDE, G V,
VAN RIJN, A C, WERTEN, M W T, WIND, R D, VAN DEN BOSCH, T, VAN HEERDE, G

AB: NOVELTY - A tabular silver halide emulsion consisting of more than 75% tabular
grains of the total grain projected area comprises, silver halide grains nucleated in the
presence of a nucleation peptizer and grown in the presence of a growth peptizer., DETAILED
DESCRIPTION - At least one of the peptizers is pure collagen like materials prepared by
genetic engineering of native collagen encoding nucleic acid and having an amino acid
sequence comprising more than 4 different amino acids., INDEPENDENT CLAIMS are also included
for the following:, (1) the preparation of the tabular silver halide emulsion (as above);,
(2) the production of a photographic element comprising, applying the above emulsion in a
known manner per se with at least one silver halide emulsion layer, having an aspect ratio
of at least 5;, (3) a photographic element obtained as above;, (4) the production of
recombinant collagen like polypeptide comprising expression of collagen like polypeptide
nucleic acid sequence (I) by a microorganism (especially not including E. coli or
Saccharomyces cerevisiae) to a degree greater than 0.95 g/l and is free of helix structure;,
(5) a substantially pure collagen like material prepared by genetic engineering of native
collagen encoding nucleic acid and the peptizer has an amino acid sequence exhibiting more
than 40% homology with native collagen and comprising more than 4 different amino acid
types; and, (6) a recombinant collagen compound., USE - The emulsion is suitable for
photographic application and comprising further compounds acceptable for application e.g.
second clearly defined amount of growth peptizer (claimed)., ADVANTAGE - Recombinant DNA
technology enables the efficient production of large amounts of substantially pure collagen
material, providing a high level of expression without requiring expensive media, expression
hosts or non-secreting expression hosts. An improved AgX-emulsion production is possible
therefore leading to a reduction in production costs. The new recombinant collagens have a
high degree of tabular grain formation at pH 5.5-7, therefore offering the possibility of
preparing silver halide emulsions which have less stringently controlled pH as they are less
pH dependent. Also recombinant collagens having an amino acid sequence with more than 4
amino acids offers increased variability in the encoding sequence and therefore allows for a
higher degree of expression.

69. Document ID: AU 9884113 A, WO 9904000 A1
L10: Entry 69 of 86
File: DWPI
Feb 10, 1999

DERWENT-ACC-NO: 1999-132244
DERWENT-WEEK: 199925

TITLE: New isolated adipocyte complement related polypeptides - used to develop products for
modulating energy balance in mammals, protecting endothelial cells from injury or for
antimicrobial or neurotransmitter-mod ulated applications

PRIORITY-DATA:
1997US-0053154
July 18, 1997

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
AU 9884113 A	February 10, 1999	N/A	000	C12N015/12
WO 9904000 A1	January 28, 1999	E	127	C12N015/12

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	APPL-DESCRIPTOR
AU 9884113A	July 17, 1998	1998AU-0084113	N/A
AU 9884113A	N/A	WO 9904000	Based on
WO 9904000A1	July 17, 1998	1998WO-US14864	N/A

INT-CL (IPC): A61K 38/17; A61K 48/00; C07K 14/47; C07K 16/18; C07K 19/00; C12N 5/10; C12N 15/12;
C12N 15/62; C12Q 1/68; G01N 33/50

IN: SHEPPARD, P O

AB: An isolated polypeptide comprising a sequence of amino acid residues that is at
least 75% identical in to residues 26-281 of the 281 amino acid human zsig37 sequence (II)
given in the specification, where the sequence comprises: (a) Gly-Xaa-Xaa or Gly-Xaa-Pro
repeats forming a collagen domain, where Xaa is any amino acid; and (b) a carboxy-terminal

globular portion., Also claimed are:, (1) an isolated polypeptide selected from: (a) a
polypeptide having a sequence of amino acid residues that is at least 75% identical in amino
acid sequence to amino acid residue 99 to 140 of the Zsig37 sequence (II); (b) a polypeptide
having a sequence of amino acid residues that is at least 75% identical in amino acid
sequence to amino acid residue 140 or 141 to amino acid residue 281 of sequence (II); and
(c) a polypeptide having a sequence of amino acid residues that is at least 75% identical in
amino acid sequence to amino acid residue 99 to 281 of sequence (II);, (2) a fusion protein
consisting of a first portion and a second portion joined by a peptide bond, the first
portion comprising a polypeptide selected from: (a) a polypeptide comprising a sequence of
amino acid residues that is at least 75% identical to amino acid residue 26 to 281 of
sequence (II); (b) a polypeptide comprising a sequence of amino acids 1, 22 or 26 to 281 of
sequence (II); (c) a polypeptide comprising a sequence of amino acid residues from residue
1, 22 or 26 to 281 in another 281 amino acid murine zsig37 sequence (III) given in the
specification; (d) a portion of the zsig37 polypeptide as in sequence (II) or (III),
containing the collagen-like domain or a portion of the collagen-like domain capable of
dimerisation or oligomerisation; (e) a portion of the zsig37 polypeptide as in (II) or (III)
containing the globular-like domain or an active portion of the globular-like domain; or (f)
a portion of the zsig37 polypeptide as in (II) or (III) including the collagen-like domain
and the globular domain; and the second portion comprising another polypeptide;, (3) a
fusion protein comprising a secretory signal sequence having an amino acid sequence of amino
acid residues 1-21, or 1-25 of sequence (II) or (III), where the secretory signal sequence
is operably linked to an additional polypeptide;, (4) an expression vector comprising the
following operably linked elements: (a) a transcription promoter; (b) a DNA segment encoding
a polypeptide comprising a sequence of amino acid residues that is at least 75% identical in
amino acid sequence to residues 26-281 of sequence (II), where the sequence comprises: (i)
Gly-Xaa-Xaa or Gly-Xaa-Pro repeats forming a collagen domain, where Xaa is any amino acid;
and (ii) a carboxy-terminal globular portion; and (c) a transcription terminator;, (5) a
cultured cell into which has been introduced an expression vector comprising the operably
linked elements as in (4), where the cell expresses the polypeptide encoded by the DNA
segment;, (6) an antibody that specifically binds to an epitope of a polypeptide comprising
a sequence of amino acid residues that is at least 75% identical in amino acid sequence to
residues 26-281 of sequence (II) where the sequence is as in (A);, (7) a binding protein
that specifically binds to an epitope of a polypeptide comprising a sequence of amino acid
residues that is at least 75% identical to residues 26-281 of sequence (II), where the
sequence is as in (A);, (8) an isolated polynucleotide (PN) encoding a polypeptide
comprising a sequence of amino acid residues that is at least 75% identical to residues
26-281 of sequence (II) where the sequence is as in (A);, (9) an isolated PN selected from:
(a) a sequence of nucleotides from nucleotides 465-688, 688-1016, 691-1016, 465-1016,
364-490, 490-912, 364-912 or 364-490 of sequence (I) (2769 nucleotides in length); (b) a PN
encoding a polypeptide having a sequence of amino acid residues that is at least 75%
identical to amino acid residue 99, 140 or 141 to 281, or 99 to 140 of sequence (II); (c)
nucleotide sequences (NSs) complementary to (a) or (b); and (d) degenerate NSs of (a), (b)
or (c);, (10) an isolated PN encoding a fusion protein consisting of a first portion and a
second portion as in (2) joined by a peptide bond;, (11) an isolated PN encoding a fusion
protein comprising a secretory signal sequence having an amino acid sequence of amino acid
residues 1-21 or 1-25 of sequence (II), where the secretory signal sequence is operably
linked to an additional polypeptide;, (12) an isolated PN comprising a sequence of
nucleotide 1 to 843 of the 843 bp artificial degenerate zsig37 sequence (IV) given in the
specification;, (13) an oligonucleotide probe or primer comprising at least 14 contiguous
nucleotides of a PN of sequence (IV) or a complementary sequence., USE - The novel zsig37
polypeptides have homology to adipocyte complement related proteins Acrp30 and human apM1
(HUMUPST2-1). The polypeptides can be used to modulate energy balance in mammals or to
protect endothelial cells from injury. zsig37 polypeptides modulate cellular metabolic
reactions including adipogenesis, gluconeogenesis, glycogenolysi s, lipogenesis, glucose
uptake, protein synthesis, thermogenesis, or oxygen utilisation. zsig37 polypeptide protects
endothelial cells in organ preservation, for cryopreservation, for surgical pretreatment or
to prevent injury due to ischemia and/or inflammation. Expression of zsig37 polypeptide in
the heart suggests that the protein may modulate acetylcholine and/or norepinephrine
release. zsig37 polypeptides may also find use as neurotransmitters or as modulators of
neurotransmission, as indicated by expression of the polypeptide in tissues associated with
the sympathetic or parasympathetic nervous system,. The zsig37 polypeptides may also be used
in modulating nutrient uptake. They can also be used for antimicrobial or neurotransmit
ter-modulated applications. The products can also be used for gene therapy, antibody
production, detection, diagnosis, drug screening, and for production of transgenic animals.

70. Document ID: EP 951537 A1, WO 9827202 A1, FR 2757874 A1, AU 9855637 A
L10: Entry 70 of 86

File: DWPI

Oct 27, 1999

DERWENT-ACC-NO: 1998-362771
DERWENT-WEEK: 199950

TITLE: New recombinant nucleic acid for expressing collagen or derivatives in plants - useful as,
e.g. bio-materials and in therapeutic, cosmetic and odontological compositions

PRIORITY-DATA:
1996FR-0016224

December 17, 1996

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 951537 A1	October 27, 1999	F	000	C12N015/00
WO 9827202 A1	June 25, 1998	F	138	C12N015/00
FR 2757874 A1	July 3, 1998	N/A	000	C12N015/12
AU 9855637 A	July 15, 1998	N/A	000	C12N015/00

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	APPL-DESCRIPTOR
EP 951537A1	December 17, 1997	1997EP-0952089	N/A
EP 951537A1	December 17, 1997	1997WO-FR02331	N/A
EP 951537A1	N/A	WO 9827202	Based on
WO 9827202A1	December 17, 1997	1997WO-FR02331	N/A
FR 2757874A1	December 17, 1996	1996FR-0016224	N/A
AU 9855637A	December 17, 1997	1998AU-0055637	N/A
AU 9855637A	N/A	WO 9827202	Based on

INT-CL (IPC): A01H 5/00; A01H 5/08; A01H 5/10; A61K 7/48; A61K 38/39; C07K 14/78; C12N 1/21; C12N 5/10; C12N 15/00; C12N 15/12; C12N 15/82

IN: BOURNAT, P, COMTE, J, EXPOSITO, J, GARRONE, R, GRUBER, V, MEROT, B, RUGGIERO, F, GRUBER, V S M

AB: Use of a recombinant nucleic acid (A) comprising: (i) cDNA encoding at least 1 mammalian collagen chain, or derived proteins (I), and (ii) elements that allow expression of (I) in plant cells, particularly a promoter and terminator, for transformation of plant cells, is new. The transformed cells, or plants produced from them, are used to produce (I).

Also new are: (1) (A); (2) vector, particularly a plasmid, containing (A); (3) host cells, particularly a bacterium such as Agrobacterium tumefaciens transformed with this vector; (4) plants and their extracts and parts transformed so that (A) is stably integrated into the genome, and (5) (I) produced by these plants or their cells., USE - The transformed plants, their extracts and parts are useful as biomaterials (haemostatic compresses, sponges or bandages) and in pharmaceutical, medical, odontological, cosmetic and biotechnological compositions (e.g. as prostheses for cardiac valves, ligaments or tendons; skin substitutes; gingival implants; microcapsules for perfumes; guide tubes for nerve regeneration; slow release products for antibiotics, growth factors, anticancer agents or anti-inflammatories; surgical thread and components of ointments). They are suitable for treating any disorder related to collagen dysfunction and gelatin, produced from collagen, is used to produce glues, surgical prostheses and foods., ADVANTAGE - Producing (I) in plants is inexpensive and avoids the risk of contamination by viruses and prions, associated with isolation from animal sources and permits easy purification. Homotrimeric human type I collagen is produced in a form similar to that present in human tissues and is only very weakly immunogenic.

71. Document ID: EP 961833 A1, WO 9816655 A1, AU 9747482 A
L10: Entry 71 of 86

File: DWPI

Dec 8, 1999

DERWENT-ACC-NO: 1998-251297
DERWENT-WEEK: 200002

TITLE: Antibody for native human plasma hyaluronidase - useful for, e.g. treating or preventing cancer associated with a LuCa-1 defect

PRIORITY-DATA:

1997US-0916935	August 21, 1997
1996US-0733360	October 17, 1996

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 961833 A1	December 8, 1999	E	000	C12P021/08
WO 9816655 A1	April 23, 1998	E	095	C12P021/08
AU 9747482 A				

May 11, 1998
N/A
000
C12P021/08

APPLICATION-DATA:
PUB-NO APPL-DATE APPL-NO APPL-DESCRIPTOR
EP 961833A1 October 7, 1997 1997EP-0910003 N/A
EP 961833A1 October 7, 1997 1997WO-US18089 N/A
EP 961833A1 N/A WO 9816655 Based on
WO 9816655A1 October 7, 1997 1997WO-US18089 N/A
AU 9747482A October 7, 1997 1997AU-0047482 N/A
AU 9747482A N/A WO 9816655 Based on

INT-CL (IPC): A61K 31/70; A61K 38/46; A61K 39/395; C07K 16/40; C12N 9/26; C12N 15/52; C12P 21/08; G01N 33/543

IN: CSOKA, A, FROST, G I, STERN, R, WONG, T M

AB: An antibody (Ab) characterised by its ability to bind to native human plasma hyaluronidase (hpHAse), is new. Also claimed are: (1) a hybridoma cell lines 17E9 and 4D5 having ATCC accession number HB-12213 and HB-12214, respectively; (2) an assay device for detection of hyaluronidase activity comprising an insoluble support, and a biotinylated hyaluronic acid (bHA) covalently bound to the support; (3) substantially purified hpHAse characterised by a fatty acid moiety that is resistant to cleavage by phospholipase C, phospholipase D and N-glycosidase-F; (4) a method for purifying a native acid active hyaluronidase (aaHAse) from a sample by: (a) dissolving a sample suspected of containing an aaHAse in a solution at a temperature substantially less than room temperature comprising a non-ionic detergent; (b) raising the temperature of the solution to a temperature substantially greater than room temperature, where the raising results in the formation of a detergent-rich phase comprising aaHAse and a detergent poor phase, and (c) isolating the aaHAse from the detergent-rich phase; (5) an expression system for production of recombinant hpHAse, comprising a transformed cell containing a nucleic acid construct comprising hpHAse-encoding nucleic acid operably linked to a eukaryotic promoter; and (6) an isolated recombinant hpHAse polypeptide., USE - The Ab can be used for purifying hpHAse, or immunopurifying native hpHAse from a sample. The anti-hpHAse Ab can be used for identifying a patient having or susceptible to a condition associated with a LuCa-1 defect. The hpHAse and the construct of (5) can be used for the treatment or prevention of a cancer associated with a LuCa-1 defect (all claimed). The hpHAse can be used as an anti-cancer agent, can be administered to facilitate lysis, particularly hypodermoclysis, and can be used to treat stroke or myocardial infarction. It can also be used to treat oedema associated with brain tumours, particularly with glioblastoma multiform.

72. Document ID: WO 9738710 A1, AU 9730566 A
L10: Entry 72 of 86
File: DWPI
Oct 23, 1997

DERWENT-ACC-NO: 1997-526203
DERWENT-WEEK: 199748

TITLE: Recombinant production of (pro)collagen having correct folding - using vectors encoding collagen sub:unit and collagen post-translational enzyme respectively

PRIORITY-DATA:
1996US-0631336 April 12, 1996

PATENT-FAMILY:
PUB-NO PUB-DATE LANGUAGE PAGES MAIN-IPC
WO 9738710 A1 October 23, 1997 E 090 A61K038/39
AU 9730566 A November 7, 1997 N/A 000 A61K038/39

APPLICATION-DATA:
PUB-NO APPL-DATE APPL-NO APPL-DESCRIPTOR
WO 9738710A1 April 11, 1997 1997WO-US07300 N/A
AU 9730566A April 11, 1997 1997AU-0030566 N/A
AU 9730566A N/A WO 9738710 Based on

INT-CL (IPC): A61K 38/17; A61K 38/39; C12P 21/00

IN: KIVIRIKKI, K I, PIHLAJANIEMI, T

AB: A novel method for producing a (pro)collagen polypeptide which is selected from collagen types IV, V, VI, VII, VIII, IX, X, XI, XII, XIII, XIV, XV, XVI, XVII, XVIII, and XIX, comprises: (a) culturing a host cell, where the host cell has been infected, transfected or transformed with: (i) a first expression vector comprising a polynucleotide (PN) molecule having a nucleic acid sequence which encodes a (pro)collagen subunit; and (ii) a second expression vector comprising a PN molecule having a nucleic acid sequence which encodes at least one (pro)collagen post-translational enzyme or enzyme subunit; and (b) purifying the (pro)collagen polypeptide. Also claimed are: (1) a collagen polypeptide produced by a method as above; and (2) is a host cell which has been infected, transfected or transformed with first and second expression vectors for collagen production as above.,

USE - The methods can be used for the production of collagens such as human collagens which can be used in therapeutic applications., ADVANTAGE - The method provides for the synthesis of correctly folded proteins so that they exhibit the normal triple-helical conformation characteristic of procollagens and collagens. Purification of the collagens is greatly facilitated.

73. Document ID: BR 9611547 A, WO 9717988 A1, AU 9676790 A, NO 9802181 A, EP 861086 A1, CN 1207046 A
L10: Entry 73 of 86
File: DWPI
Jun 15, 1999

DERWENT-ACC-NO: 1997-289059
DERWENT-WEEK: 199929

TITLE: New type IX collagen fusion proteins - used for treating diseases or conditions associated with abnormalities in collagen production or autoimmunity to collagen

PRIORITY-DATA:
1996US-0745539 November 12, 1996
1995US-0006608 November 13, 1995

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
BR 9611547 A	June 15, 1999	N/A	000	A61K038/17
WO 9717988 A1	May 22, 1997	E	032	A61K038/17
AU 9676790 A	June 5, 1997	N/A	000	A61K038/17
NO 9802181 A	July 6, 1998	N/A	000	C07K019/00
EP 861086 A1	September 2, 1998	E	000	A61K038/17
CN 1207046 A	February 3, 1999	N/A	000	A61K038/17

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	APPL-DESCRIPTOR
BR 9611547A	November 13, 1996	1996BR-0011547	N/A
BR 9611547A	November 13, 1996	1996WO-US18149	N/A
BR 9611547A	N/A	WO 9717988	Based on
WO 9717988A1	November 13, 1996	1996WO-US18149	N/A
AU 9676790A	November 13, 1996	1996AU-0076790	N/A
AU 9676790A	N/A	WO 9717988	Based on
NO 9802181A	November 13, 1996	1996WO-US18149	N/A
NO 9802181A	May 13, 1998	1998NO-0002181	N/A
EP 861086A1	November 13, 1996	1996EP-0939682	N/A
EP 861086A1	November 13, 1996	1996WO-US18149	N/A
EP 861086A1	N/A	WO 9717988	Based on
CN 1207046A	November 13, 1996	1996CN-0199541	N/A

INT-CL (IPC): A61K 38/17; C07K 1/00; C07K 14/00; C07K 14/78; C07K 19/00; C12P 21/00

IN: ALA-KOKKO, L, MARTIN, G, NEFF, T B, VUORIO, E

AB: A fusion protein (FP) comprises a human type IX collagen linked to a heterologous peptide sequence. Also claimed are: (A) a method for producing recombinant human FP comprising: (a) culturing a host cell transformed with the recombinant DNA expression vector which expressed the FP; and (b) recovering the FP from the cell culture; and (B) a protein comprising human recombinant type IX collagen., USE - The FPs can be used for treating diseases or condition associated with abnormalities in collagen production or autoimmunity to collagen. They can be used for treating immune system-mediated diseases e.g. rheumatoid arthritis, osteoarthritis, reactive arthritis, autoimmune hearing disease, cartilage inflammation due to bacterial or viral infections (e.g. Lyme's disease), parasitic disease, bursitis, corneal diseases and ankylosing spondylitis (fusion of the spine). The FPs can also be used for the production of antibodies.

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	APPL-DESCRIPTOR
EP 859838A1	August 30, 1996	1996EP-0928607	N/A
EP 859838A1	August 30, 1996	1996WO-GB02122	N/A
EP 859838A1	N/A	WO 9708311	Based on
WO 9708311A1	August 30, 1996	1996WO-GB02122	N/A
AU 9668326A	August 30, 1996	1996AU-0068326	N/A
AU 9668326A	N/A	WO 9708311	Based on

INT-CL (IPC): A01K 67/027; A23L 1/305; A61K 38/39; A61L 27/00; C07K 14/78; C12C 5/02; C12N 15/12; C12N 15/62; D06M 15/15 ; G01N 33/68; G03C 1/047

74. Document ID: EP 859838 A1, WO 9708311 A1, AU 9668326 A
L10: Entry 74 of 86
File: DWPI
Aug 26, 1998

DERWENT-ACC-NO: 1997-179268
DERWENT-WEEK: 199838

TITLE: Novel pro:collagen mol. - comprising pro:collagen C-pro:peptide attached to an alien collagen alpha-chain or non-collagen material, useful e.g. for wound healing

PRIORITY-DATA:

1996GB-0012476	June 14, 1996
1995GB-0017773	August 31, 1995
1996GB-0006152	March 23, 1996

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 859838 A1	August 26, 1998	E	000	C12N015/12
WO 9708311 A1	March 6, 1997	E	069	C12N015/12
AU 9668326 A	March 19, 1997	N/A	000	C12N015/12

IN: BULLEID, N, KADLER, K

AB: A mol. comprising at least a first moiety having procollagen C-propeptide activity attached to a second moiety selected from an alien collagen alpha -chain and non-collagen materials, is new. Also claimed are: (1) a collagen mol. comprising a non-natural combination of collagen alpha -chains; (2) a collagen fibril comprising the mol. of (1); (3) a collagen fibre comprising the fibrils of (2); (4) DNA encoding the above collagen mols.; (5) an expression host transformed or transfected with the DNA of (4) operably linked to regulatory sequences sufficient to direct expression; and (6) a transgenic animal contg. the DNA of (4) in its genome, operably linked to regulatory sequences sufficient to direct expression., USE - The novel collagen mol. can be used for treatment or diagnosis in humans or animals, esp. for the treatment of procollagen suicide, as an adhesive or implant, to promote (chronic) wound healing or fibrotic diseases with reduced scarring or for use in photography, brewing, foodstuffs or textiles (claimed)., ADVANTAGE - The novel collagen mols., esp. when contg. substitutions in the recognition site, may have significantly altered properties and characteristics, such as different binding kinetics or alpha -chain selection properties.

75. Document ID: WO 9704123 A1
L10: Entry 75 of 86
File: DWPI

Feb 6, 1997

DERWENT-ACC-NO: 1997-132659
DERWENT-WEEK: 199712

TITLE: Transgenic plants able to produce collagen cpd., partic. gelatin - contain, integrated in
the genome, DNA encoding collagen, allows prodn. of kosher gelatin, collagen for use in
pharmaceuticals, cosmetics etc.

PRIORITY-DATA:
1995US-0492427
July 19, 1995

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9704123 A1	February 6, 1997	E	045	C12P021/02

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	APPL-DESCRIPTOR
WO 9704123A1	July 19, 1996	1996WO-US12049	N/A

INT-CL (IPC): A01H 1/00; A01H 5/00; C12N 5/10; C12N 5/14; C12N 15/00; C12N 15/09; C12N 15/12;
C12N 15/29; C12N 15/82; C12P 21/02

IN: HICKMAN, S, HOLZER, D, LOIKE, J D

AB: Prodn. of transgenic plants able to express a collagen cpd. (I) comprises
inserting into plant cells a gene construct (A) contg. a DNA sequence (II) encoding (I)
operably linked 5' to a promoter functional in plants, regenerating the plants from the
cells and growing them. Also claimed are: (1) transgenic plants produced this way, cells
produced by, or descended from, them and their seeds; (2) collagen and gelatin produced from
these plants or seeds; (3) food contg. gelatin as above; (4) (A), and (5) plant cells
transformed with (A)., 47 Suitable plants are specified, e.g. rice, wheat, barley, onions,
sugar cane, tobacco and potato. (I) is isolated by wet milling. The promoter (partic. the
35S component of cauliflower mosaic virus, CaMV) may include an enhancer sequence and opt.
the construct also contains at least 1 of: (i) transcription termination sequence; (ii)
maize alcohol dehydrogenase 1 intron 1, or (iii) rice actin 1 intron 1 (the last 2
positioned between the promoter and (II)). Pref. (i) is the polyA signal of CaMV, nopaline
synthase or octopine synthase genes. Opt. a plant-expressed marker, pref. a neomycin
resistance gene, is included to facilitate selection of transformants. This gene is under
the control of its own promoter and terminator. (II) encodes bovine or human (pro)collagen
or its fragments., USE - (I) is recovered as gelatin or a gelatin-corn starch combination.
Gelatin is used in foods, photography, pharmaceuticals, medicines, leather, glues and
printing. Collagen is used e.g. for medical repair, in cosmetics or drug delivery systems.,
ADVANTAGE - Kosher gelatin can now be produced on a large scale and inexpensively. Gelatins
of strength 0-350 (pref. 90-300) Bloom can be made and (I) can be placed under the control
of tissue or developmental specific promoters, esp. in a plant that already produces a food
gum so that a combination with synergistic gelling properties is formed.

76. Document ID: WO 9637104 A1, US 5700690 A, AU 9658681 A
L10: Entry 76 of 86
File: DWPI
Nov 28, 1996

DERWENT-ACC-NO: 1997-020848
DERWENT-WEEK: 199702

TITLE: Vector contg. gene able to attenuate fibroblasts under control of FSP1 gene promoter -
used to inhibit fibrogenesis and scar formation

PRIORITY-DATA:
1995US-0452259
May 26, 1995

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9637104 A1	November 28, 1996	E	033	A01N043/04
US 5700690 A	December 23, 1997	N/A	012	C12N015/63
AU 9658681 A	December 11, 1996	N/A	000	A01N043/04

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	APPL-DESCRIPTOR
WO 9637104A1	May 21, 1996	1996WO-US07336	N/A
US 5700690A	May 26, 1995	1995US-0452259	N/A
AU 9658681A			

May 21, 1996
1996AU-0058681
N/A
AU 9658681A
N/A
WO 9637104
Based on

INT-CL (IPC): A01N 43/04; A61K 31/715; C12N 15/00; C12N 15/09; C12N 15/63; C12N 15/70; C12N 15/74

IN: DANOFF, T, NEILSON, E G, OKADA, H, STRUTZ, F

AB: A vector comprising a promoter (I) from an FSP1 gene and a downstream gene (II)
able to attenuate fibroblasts is claimed., USE - The vector is used to inhibit
fibrinogenesis in tissue (claimed), reducing the risk of scar formation and maintaining the
integrity of organs affected by e.g. cystic fibrosis, interstitial nephritis, hepatic
cirrhosis and pulmonary fibrosis. Also (not claimed) naked DNA contg. (I) and (II) can be
used similarly and the vectors can be used to identify and differentiate between fibroblasts
of various origins, e.g. those able to synthesise specific forms of collagen, to respond to
different cytokines or where genetically modified (in this case (II) is an antisense
sequence directed against wild-type collagen and its inability to prevent collagen
expression indicates a mutation)., ADVANTAGE - (I) conditionally overexpresses (II) and
limits (II) expression to fibroblasts., A vector comprising a promoter (I) from an FSP1 gene
and a downstream gene (II) able to attenuate fibroblasts is claimed., USE - The vector is
used to inhibit fibrinogenesis in tissue (claimed), reducing the risk of scar formation and
maintaining the integrity of organs affected by e.g. cystic fibrosis, interstitial
nephritis, hepatic cirrhosis and pulmonary fibrosis. Also (not claimed) naked DNA contg. (I)
and (II) can be used similarly and the vectors can be used to identify and differentiate
between fibroblasts of various origins, e.g. those able to synthesise specific forms of
collagen, to respond to different cytokines or where genetically modified (in this case (II)
is an antisense sequence directed against wild-type collagen and its inability to prevent
collagen expression indicates a mutation)., ADVANTAGE - (I) conditionally overexpresses (II)
and limits (II) expression to fibroblasts.

77. Document ID: AU 708511 B, WO 9603051 A1, AU 9532047 A, EP 772404 A1, JP 10504715 W, KR 97704874 A, NZ 291042 A
L10: Entry 77 of 86
File: DWPI
Aug 5, 1999

DERWENT-ACC-NO: 1996-116711
DERWENT-WEEK: 199943

TITLE: Transgenic non-human mammals capable of secreting exogenous (pro)collagen into their milk
- are healthy and capable of producing (pro)collagen at high levels, usually in trimeric form

PRIORITY-DATA:
1995US-0482173
June 7, 1995
1994US-0281493
July 27, 1994

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
AU 708511 B	August 5, 1999	N/A	000	A23C009/00
WO 9603051 A1	February 8, 1996	E	088	A23C009/00
AU 9532047 A	February 22, 1996	N/A	000	A23C009/00
EP 772404 A1	May 14, 1997	E	000	A23C009/00
JP 10504715 W	May 12, 1998	N/A	082	A01K067/027
KR 97704874 A	September 6, 1997	N/A	000	C12N015/00
NZ 291042 A	December 23, 1998	N/A	000	A01K067/027

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	APPL-DESCRIPTOR
AU 708511B	July 27, 1995	1995AU-0032047	N/A
AU 708511B	N/A	AU 9532047	Previous Publ.
AU 708511B	N/A	WO 9603051	Based on
WO 9603051A1	July 27, 1995	1995WO-US09580	N/A
AU 9532047A	July 27, 1995	1995AU-0032047	

N/A

AU 9532047A
N/A
WO 9603051
Based on

EP 772404A1
July 27, 1995
1995EP-0928194
N/A

EP 772404A1
July 27, 1995
1995WO-US09580
N/A

EP 772404A1
N/A
WO 9603051
Based on

JP10504715W
July 27, 1995
1995WO-US09580
N/A

JP10504715W
July 27, 1995
1996JP-0505986
N/A

JP10504715W
N/A
WO 9603051
Based on

KR97704874A
July 27, 1995
1995WO-US09580
N/A

KR97704874A
January 25, 1997
1997KR-0700600
N/A

KR97704874A
N/A
WO 9603051
Based on

NZ 291042A
July 27, 1995
1995NZ-0291042
N/A

NZ 291042A
July 27, 1995
1995WO-US09580
N/A

NZ 291042A
N/A
WO 9603051
Based on

INT-CL (IPC): A01K 67/027; A23C 9/00; A23J 1/00; A23J 1/20; C07H 15/00; C07K 1/00; C07K 17/00;
C12N 5/00; C12N 5/10; C12N 5/14; C12N 15/00; C12N 15/09; C12N 15/12; C12P 21/06

IN: BERG, R A, DE WIT, I, KARATZAS, C N, PIEPER, F, PLATENBURG, G, TOMAN, P D

AB: A novel transgenic nonhuman mammal (A) has a transgene (TG), which comprises: (i)
a mammary gland specific promoter; (ii) a mammary gland specific enhancer; (iii) a secretory
DNA segment (I) encoding a signal peptide functional in mammary secretory cells (MSC) of
(A); and (iv) a recombinant DNA segment encoding an exogenous procollagen polypeptide (PP)
operably linked to (I) which is operably linked to (i) and (ii), where the TG in an adult
form of (A) is capable of expressing the secretory-recombinant DNA segment in the MSC to
produce a form of the exogenous PP that is processed and secreted by the MSC into milk as
exogenous procollagen or collagen., USE - The transgenic nonhuman mammals are useful for the
prodn. of PP/C esp. secreted into their milk (claimed). The collagen produced is used in
therapeutics, esp. in reconstructive and cosmetic procedures., ADVANTAGE - The transgenic
nonhuman mammals are able to produce viable and correctly synthesised and assembled collagen
in their milk. The transgenic are healthy and secondary expression of collagen in other
tissues is avoided.

78. Document ID: JP 08023979 A
L10: Entry 78 of 86
File: DWPI
Jan 30, 1996

DERWENT-ACC-NO: 1996-133420
DERWENT-WEEK: 199614

TITLE: Human collagen expression vector for transfection of insect host - which is capable of
hydroxylating collagen proline gps., resulting in expression of stable triple stranded collagen
molecules

PRIORITY-DATA:
1994JP-0164433
July 15, 1994

PATENT-FAMILY:
PUB-NO
PUB-DATE
LANGUAGE
PAGES
MAIN-IPC
JP 08023979 A
January 30, 1996
N/A
016
C12N015/09

APPLICATION-DATA:
PUB-NO
APPL-DATE
APPL-NO
APPL-DESCRIPTOR
JP08023979A
July 15, 1994
1994JP-0164433
N/A

INT-CL (IPC): C12N 5/10; C12N 15/09; C12P 21/02; C12P 21/02; C12R 1/91; C12N 5/10; C12R 1/91

IN: No data.

AB: Human collagen expression vector for the expression of human collagen in a host
cell, is claimed, where the vector comprises a viral DNA (contg. human collagen cDNA)
capable of infecting an insect host, the host being able to hydroxylate collagen proline
gps.., USE - The expression vector can used for the prepn. of human collagen (claimed).,

ADVANTAGE - The human collagen synthesised, is formed as a stable triple stranded molecule.

79. Document ID: US 5741670 A, WO 9321226 A1, AU 9339727 A, EP 635029 A1, JP 07505881 W, EP 635029 A4, US 5686059 A
L10: Entry 79 of 86
File: DWPI
Apr 21, 1998

DERWENT-ACC-NO: 1993-351661
DERWENT-WEEK: 199823

TITLE: New collagen binding fragments of cartilage matrix protein - used for stimulating collagen
fibril formation and collagen adhesion, also for targetted drug delivery to collagenous tissue

PRIORITY-DATA:
1993US-0006096
January 15, 1993
1992US-0866403
April 10, 1992
1995US-0462128
June 5, 1995
1995US-0463180
June 5, 1995

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 5741670 A	April 21, 1998	N/A	019	C12P021/06
WO 9321226 A1	October 28, 1993	E	036	C07K007/10
AU 9339727 A	November 18, 1993	N/A	000	C07K007/10
EP 635029 A1	January 25, 1995	E	000	C07K007/10
JP 07505881 W	June 29, 1995	N/A	000	C07K014/47
EP 635029 A4	January 24, 1996	N/A	000	C07K007/10
US 5686059 A	November 11, 1997	N/A	019	A61K049/00

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	APPL-DESCRIPTOR
US 5741670A	April 10, 1992	1992US-0866403	CIP of
US 5741670A	January 15, 1993	1993US-0006096	Div ex
US 5741670A	June 5, 1995	1995US-0463180	N/A
WO 9321226A1	April 2, 1993	1993WO-US03107	N/A
AU 9339727A	April 2, 1993	1993AU-0039727	N/A
AU 9339727A	N/A	WO 9321226	Based on
EP 635029A1	April 2, 1993	1993EP-0909236	N/A
EP 635029A1	April 2, 1993	1993WO-US03107	N/A
EP 635029A1	N/A	WO 9321226	Based on
JP07505881W	April 2, 1993	1993JP-0518392	N/A
JP07505881W	April 2, 1993	1993WO-US03107	N/A
JP07505881W	N/A	WO 9321226	Based on
EP 635029A4	N/A	1993EP-0909236	N/A
US 5686059A	April 10, 1992	1992US-0866403	CIP of
US 5686059A	January 15, 1993	1993US-0006096	Cont of
US 5686059A	June 5, 1995	1995US-0462128	N/A

INT-CL (IPC): A61K 37/12; A61K 38/00; A61K 38/06; A61K 38/17; A61K 49/00; C07H 21/04; C07K 1/00;
C07K 7/10; C07K 13/00; C07K 14/47; C12N 1/20; C12N 1/21; C12N 15/12; C12N 15/63; C12P 21/06

IN: GOETINCK, P F, TONDRAVI, M

AB: New polypeptide (I) is a fragment or analogues of cartilage matrix protein (CMP)
domains CMP-1 or CMP-2 and can bind collagen. Also new are (i) method for forming collagen
fibrils by contacting CMP (or its collagen-binding fragments) with colagen; (2) conjugates
(A) of (I) with an imaging or therapeutic agent; (3) DNA (II) encoding (I); (4) vectors and
cells contg. (II) and (5) polypeptides produced by expressing (II). The specification
includes the 496 amino acid sequence of CMP., Pref. (I) includes a CBS2 motif, and partic.
comprises an approx. 45 amino acid N-terminal fragment of CMP-1 or -2. CMP-1 corresponds to
amino acids 23-222 of human CMP and CMP-2 to amino acids 264-453. the CBS1 for CMP-1 is
TDLVFVVDSS (40-49) and for CMP-2 TDLVFLIDGS (274-283). Homogenous regions present in e.g.
von Willerbrands factor; complement factor B or C2 etc. can also be used. Conjugates of (I)
can be produced using standard hetero-bifunctional cross-linkers or are expressed as
redcombinant fusion protein., USE - (A) are used to deliver therapeutic, diagnostic or
cosmetic cpds. to collagenous tissue e.g. fluorescent or radioactive labels; collagenase;
anticancer agents, etc.) (I) can also be applied to a surface (e.g. tissue, tooth or medical
implant) to promote collagen attachment. Stimulation of collagen fibril formation can be
used to produce prostheses for skin or other collagen tissue or to coat prostheses to
improve biocompatibility., Chimeric polypeptide which includes a fragment of cartilage
matrix protein domain CMP-1 or CMP-2 is new. The fragment includes a collagen binding site
and is at least 99% homologous with the corresponding residues of cartilage matrix protein
domain CMP-1 or CMP2., New polypeptide (I) is a fragment or analogues of cartilage matrix
protein (CMP) domains CMP-1 or CMP-2 and can bind collagen. Also new are (i) method for
forming collagen fibrils by contacting CMP (or its collagen-binding fragments) with colagen;
(2) conjugates (A) of (I) with an imaging or therapeutic agent; (3) DNA (II) encoding (I);
(4) vectors and cells contg. (II) and (5) polypeptides produced by expressing (II). The
specification includes the 496 amino acid sequence of CMP., Pref. (I) includes a CBS2 motif,
and partic. comprises an approx. 45 amino acid N-terminal fragment of CMP-1 or -2. CMP-1
corresponds to amino acids 23-222 of human CMP and CMP-2 to amino acids 264-453. the CBS1
for CMP-1 is TDLVFVVDSS (40-49) and for CMP-2 TDLVFLIDGS (274-283). Homogenous regions
present in e.g. von Willerbrands factor; complement factor B or C2 etc. can also be used.
Conjugates of (I) can be produced using standard hetero-bifunctional cross-linkers or are
expressed as redcombinant fusion protein., USE - (A) are used to deliver therapeutic,
diagnostic or cosmetic cpds. to collagenous tissue e.g. fluorescent or radioactive labels;
collagenase; anticancer agents, etc.) (I) can also be applied to a surface (e.g. tissue,
tooth or medical implant) to promote collagen attachment. Stimulation of collagen fibril
formation can be used to produce prostheses for skin or other collagen tissue or to coat
prostheses to improve biocompatibility.

80. Document ID: WO 9317099 A1, AU 9337340 A, US 5340726 A
L10: Entry 80 of 86

File: DWPI

Sep 2, 1993

DERWENT-ACC-NO: 1993-288405
DERWENT-WEEK: 199336

TITLE: New protein isolated from Ornithodoros moubata ticks - inhibits collagen-stimulated
platelet aggregation, used for treating thrombotic conditions partic coronary artery diseases

PRIORITY-DATA:
1992US-0844303
February 27, 1992
1993US-0107411
August 16, 1993

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9317099 A1	September 2, 1993	E	040	C12N005/00
AU 9337340 A	September 13, 1993	N/A	000	C12N005/00
US 5340726 A	August 23, 1994	N/A	011	C12N005/00

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	APPL-DESCRIPTOR
WO 9317099A1	February 25, 1993	1993WO-US01717	N/A
AU 9337340A	February 25, 1993	1993AU-0037340	N/A
AU 9337340A	N/A	WO 9317099	Based on
US 5340726A	February 27, 1992	1992US-0844303	Cont of
US 5340726A	August 16, 1993	1993US-0107411	N/A

INT-CL (IPC): A61K 37/12; C07H 15/12; C07K 3/00; C07K 13/00; C07K 15/00; C07K 17/00; C09H 1/00;

C12N 1/16; C12N 1/18; C12N 5/00; C12N 15/00; C12P 21/06

IN: CONNOLLY, T M, KELLER, P M, WAXMAN, L H

AB: The biochemically pure protein has a mol.wt. of 17,000 and a capacity to inhibit collagen-stimulated platelet aggregation and which does not inhibit platelet adhesion to collagen, where the protein is deriv. from the tick Ornithodoros moubata (OM)., Also claimed are (B) a protein having a specific aminoacid sequence opt. with conservative aminoacid substns., or fragments which inhibit collagen-stimulated platelet aggregation; (C) a process for the prodn. of a protein deriv. from OM tick extract and having a capacity to inhibit collagen-stimulated platelet aggregation, comprising (a) disrupting OM ticks, (b) homogenising and solubilising tick extract in an aq. soln. comrpising a buffered salt having a suitable fixed pH to produce a homogenate, (c) centrifuging the homogenate to produce supernatant protein suspension fractions, and (d) assaying the fractions and selecting a protein fraction characterised by its inhibition of collagen-stimulated platelet aggregation; (D) a gene having a specific DNA sequence shown in specification; and (E) a recombinant molecule comprising DNA coding for the protein operatively linked to an expression control sequence., USE - The protein (moubatin) is used for the treatment and prevention of thrombotic conditions, partic. coronary artery and cerebrovascular disease. The protein also inhibits collagen-induced intracelluar CaZ+ mobilisation, Purified protein has a mol.wt. of about 17 kD, an amino acid sequence given in the specification and the ability to inhibit collagen-stimulated platelet aggregation. Protein is derived from the tick Ornithodoros moubata., Also claimed is a process for producing the protein., USE - Prevention and treatment of thrombotic diseases.

81. Document ID: EP 546813 A2, CA 2084834 A, EP 546813 A3, JP 05331197 A, JP 95074235 B2, US 5321010 A
L10: Entry 81 of 86
File: DWPI
Jun 16, 1993

DERWENT-ACC-NO: 1993-190164
DERWENT-WEEK: 199324

TITLE: Biologically pure proteins of specified mol. wt. isolated from Ornithodoro s moubata - inhibit platelet adhesion to collagen, for prevention and treatment of thrombotic diseases e.g. coronary artery and cerebrovascu lar diseases

PRIORITY-DATA:
1991US-0807022
December 10, 1991

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 546813 A2	June 16, 1993	E	017	C12N015/12
CA 2084834 A	June 11, 1993	N/A	000	C12N015/12
EP 546813 A3	January 5, 1994	N/A	000	C12N015/12
JP 05331197 A	December 14, 1993	N/A	012	C07K013/00
JP 95074235 B2	August 9, 1995	N/A	011	C07K014/435
US 5321010 A	June 14, 1994	N/A	010	A61K037/00

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	APPL-DESCRIPTOR
EP 546813A2	December 9, 1992	1992EP-0311218	N/A
CA 2084834A	December 8, 1992	1992CA-2084834	N/A
EP 546813A3	December 9, 1992	1992EP-0311218	N/A
JP05331197A	December 8, 1992	1992JP-0327811	N/A
JP95074235B2	December 8, 1992	1992JP-0327811	N/A
JP95074235B2	N/A	JP 5331197	Based on
US 5321010A	December 10, 1991	1991US-0807022	N/A

INT-CL (IPC): A61K 37/00; A61K 37/02; A61K 38/00; C07K 3/18; C07K 13/00; C07K 14/435; C07K 15/00; C07K 15/08; C07K 15/12 ; C12N 15/09; C12N 15/12; C12P 21/02; C12P 21/02; C12R 1/19

IN: CONNOLLY, T M, NEEPER, M, WAXMAN, L

AB: (A) A biologically pure protein is claimed which has a mol.wt.

of 23,000 and
which inhibits platelet adhesin to collagen and which does not inhibit platelet adhesion to
fibrinogen or to fibronectin. Also claimed are: A process for producing the protein of (A)
is new and comprises (a) homogeneising and solubilising. Ornithodoros moubata (OM) tick
extracts in an aqs. soln. comprising a buffered salt having a suitable fixed pH to produce
the homogenate, (b) centrifugin g the homogenate to produce supernatant protein suspension
fractions, (c) combining supernatants and applying to anion and cation exchange resin
columns, (d) subjecting the prod. to size exclusion chromatography and (e) selecting a prod.
fraction characterised by its inhibition of platelet adhesion to collagen. A biochemically
pure protein having a mol.wt. of 15,600 which inhibits platelet adhesion to collagen and
which does not inhibit platelet adhesion to fibrinogen or fibronectin; (D) a process for
producing the protein of (C) comprising (a) carrying out steps (a)-(c) as in (C), (b)
applying the prod. to a phenyl-Superose (RTM) HPLC column, (c) applying the prod. to a HPLC
size exclusion column and (d) selecting a prod. fraction characterised by its inhibition of
platelet adhesion to collagen; (E) a recombinant molecule comprising DNA coding for a
protein as in (A), consisting of a DNA sequence coding for expression in a prokaryotic host,
the DNA sequence being operatively linked to an expression control sequence., USE - The
proteins are used as anticoagulants for the treatment and prevention of thrombotic
conditions, partic. coronary artery and cerebrovascular disease. The proteins inhibit
adhesion of platelets but do not block platelet adhesion to fibronectin or endothelial cell
adhesion to fibronectin., Purified protein has the given aminoacid compsn., a mol. wt. of
15000 inhibits platelet adhesion to collagen and does not inhibit platelet adhesion to
fibrinogen or fibronectin., USE - For inhibiting platelet adhesion to collagen e.g. for
treating and promoting thrombotic diseases.

82. Document ID: DE 69230502 E, WO 9307889 A1, AU 9230555 A, EP 625048 A1, JP 07501939 W, US 5405757 A, EP 625048 A4, AU 680606 B, AU 9744414 A, EP 962529 A1, EP 625048 B1
L10: Entry 82 of 86
File: DWPI
Feb 3, 2000

DERWENT-ACC-NO: 1993-152181
DERWENT-WEEK: 200013

TITLE: Synthesis of human pro-collagen(s) and collagen(s) - uses recombinant DNA systems to express transfected genes

PRIORITY-DATA:
1991US-0780899
October 23, 1991
1993US-0037728
March 24, 1993

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DE 69230502 E	February 3, 2000	N/A	000	C12N015/12
WO 9307889 A1	April 29, 1993	E	039	A61K037/00
AU 9230555 A	May 21, 1993	N/A	000	A61K037/00
EP 625048 A1	November 23, 1994	E	000	A61K037/00
JP 07501939 W	March 2, 1995	N/A	000	C12N005/10
US 5405757 A	April 11, 1995	N/A	010	C07K013/00
EP 625048 A4	April 5, 1995	N/A	000	A61K037/00
AU 680606 B	August 7, 1997	N/A	000	C12N005/10
AU 9744414 A	February 12, 1998	N/A	000	C12N005/10
EP 962529 A1	December 8, 1999	E	000	C12N015/12
EP 625048 B1	December 29, 1999	E	000	C12N015/12

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	APPL-DESCRIPTOR
DE 69230502E	October 22, 1992	1992DE-0630502	N/A
DE 69230502E	October 22, 1992	1992EP-0924122	N/A
DE 69230502E	October 22, 1992	1992WO-US09061	

N/A
DE 69230502E
N/A
EP 625048
Based on
DE 69230502E
N/A
WO 9307889
Based on
WO 9307889A1
October 22, 1992
1992WO-US09061
N/A
AU 9230555A
October 22, 1992
1992AU-0030555
N/A
AU 9230555A
N/A
WO 9307889
Based on
EP 625048A1
October 22, 1992
1992EP-0924122
N/A
EP 625048A1
October 22, 1992
1992WO-US09061
N/A
EP 625048A1
N/A
WO 9307889
Based on
JP 07501939W
October 22, 1992
1992WO-US09061
N/A
JP 07501939W
October 22, 1992
1993JP-0507922
N/A
JP 07501939W
N/A
WO 9307889
Based on
US 5405757A
October 23, 1991
1991US-0780899
Cont of
US 5405757A
March 24, 1993
1993US-0037728
N/A
EP 625048A4
N/A
1992EP-0924122
N/A
AU 680606B
October 22, 1992
1992AU-0030555
N/A
AU 680606B
N/A
AU 9230555
Previous Publ.
AU 680606B
N/A
WO 9307889
Based on
AU 9744414A
October 22, 1992
1992AU-0030555
Div ex
AU 9744414A
November 7, 1997
1997AU-0044414
N/A
EP 962529A1
October 22, 1992
1992EP-0924122
Div ex
EP 962529A1
October 22, 1992
1999EP-0201209
N/A
EP 962529A1
N/A
EP 625048
Div ex
EP 625048B1
October 22, 1992
1992EP-0924122
N/A
EP 625048B1
October 22, 1992
1992WO-US09061
N/A
EP 625048B1
October 22, 1992
1999EP-0201209
Related to
EP 625048B1
N/A
EP 962529
Related to
EP 625048B1
N/A
WO 9307889
Based on

INT-CL (IPC): A61K 37/00; A61K 37/02; C07K 13/00; C12N 1/19; C12N 5/10; C12N 5/22; C12N 15/00;
C12N 15/09; C12N 15/10; C12N 15/12; C12N 15/85; C12P 21/00; C12P 21/02

IN: ALA-KOKKO, L, FERTALA, A, GEDDIS, A, KIVIRIKKO, K I, PIHLAJANIEMI, T, PROCKOP, D J, SIERON, A, KIVIRIKKO, K

AB: Cells which comprises at least one transfected human procollagen or collagen gene are new. The cells express procollagen or collagen molecules having at least one chain derived from the procollagen or collagen gene or genes, other than the (pro alpha 1 (I))2pro alpha 2 (I) collagen mol. consisting of human pro alpha 1 (I) moieties, or non-human pro alpha 1 (I) moieties and human pro alpha 2 (I) moieties., Also claimed are: (1) a method for synthesising procollagen or collagen in cells comprising (a) transfecting at least one procollagen or collagen gene into cells; (b) cutting the cells to express the transfected gene; and (c) selecting those cells expressing at least one mol. as described above; (2) a collagen produced by the method of (1)., USE/ADVANTAGE - The method provides a practical source of a human fibrillator collagen which could be used to replace animal collagens widely used for injection to remove cosmetic wrinkles etc., to restore tensile strength to tissues such as the sphincher of the bladder in treatment of urinary incontinence, or in mixtures with ceramics to fill in defects in bone and enhance bone growth. Human type II procollagen, the precursor of the major collagen of cartilage may have special use in the repair of cartilage damage. Relatively large amts. of a human fibrillar procollagen can be synthesised in a recombinant cell culture system that does not make other fibrillator procollagen, facilitating purification. The proteins are correctly folded, having the triple-helical conformation, and unlike animal collagens, do not produce

an allergic
response in man. It is of a higher quality than that obtd. from animal sources, with larger
and more tightly packed fibres. The collagen should form deposits in tissues that last much
longer than the currently available materials, Cells which comprises at least one
transfected human procollagen or collagen gene are new. The cells express procollagen or
collagen molecules having at least one chain derived from the procollagen or collagen gene
or genes, other than the (pro alpha 1 (I))2pro alpha 2 (I) collagen mol. consisting of human
pro alpha 1 (I) moieties, or non-human pro alpha 1 (I) moieties and human pro alpha 2 (I)
moieties., Also claimed are: (1) a method for synthesising procollagen or collagen in cells
comprising (a) transfecting at least one procollagen or collagen gene into cells; (b)
cutting the cells to express the transfected gene; and (c) selecting those cells expressing
at least one mol. as described above; (2) a collagen produced by the method of (1).,
USE/ADVANTAGE - The method provides a practical source of a human fibrillator collagen which
could be used to replace animal collagens widely used for injection to remove cosmetic
wrinkles etc., to restore tensile strength to tissues such as the sphincher of the bladder
in treatment of urinary incontinence, or in mixtures with ceramics to fill in defects in
bone and enhance bone growth. Human type II procollagen, the precursor of the major collagen
of cartilage may have special use in the repair of cartilage damage. Relatively large amts.
of a human fibrillar procollagen can be synthesised in a recombinant cell culture system
that does not make other fibrillator procollagen, facilitating purification. The proteins
are correctly folded, having the triple-helical conformation, and unlike animal collagens,
do not produce an allergic response in man. It is of a higher quality than that obtd. from
animal sources, with larger and more tightly packed fibres. The collagen should form
deposits in tissues that last much longer than the currently available materials, Human
tumour cells comprise at least one transfected human pro-alpha-1 (PA-1) procollagenase or
collagen gene and express human procollagen or collagen having at least one chain derived
from the gene, where any chains derived from other than the above genes are derived from
expression of endogenous genes., Also claimed is a method for synthesising procollagen or
collagen in human tumour cells., USE - Treatment of cosmetic wrinkles and defects and for
restoring the tensile strength of tissues such as the bladder sphincter in the treatment of
urinary incontinence.

83. Document ID: WO 9306792 A1, US 5464450 A, US 5551954 A
L10: Entry 83 of 86
File: DWPI
Apr 15, 1993

DERWENT-ACC-NO: 1993-134081
DERWENT-WEEK: 199953

TITLE: Biodegradable drug delivery vascular stent - for release of drug at rate controlled by
degradation of the material

PRIORITY-DATA:
1992US-0944069
September 11, 1992
1991US-0771655
October 4, 1991
1993US-0013145
February 1, 1993
1994US-0215206
March 21, 1994
1994US-0322107
October 12, 1994

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9306792 A1	April 15, 1993	E	034	A61F002/06
US 5464450 A	November 7, 1995	N/A	007	A61F002/06
US 5551954 A	September 3, 1996	N/A	011	A61F002/06

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	APPL-DESCRIPTOR
WO 9306792A1	October 2, 1992	1992WO-US08463	N/A
US 5464450A	October 4, 1991	1991US-0771655	Cont of
US 5464450A	February 1, 1993	1993US-0013145	Cont of
US 5464450A	March 21, 1994	1994US-0215206	N/A
US 5551954A	October 4, 1991	1991US-0771655	CIP of
US 5551954A	September 11, 1992	1992US-0944069	Cont of
US 5551954A	October 12, 1994	1994US-0322107	N/A

INT-CL (IPC): A61F 2/04; A61F 2/06; A61M 29/02

IN: BUSCEMI, P J, PALME, D F, STEJSKAL, E A, WANG, L,

DOYLE, E S

AB: Biodegradable stent for insertion into a lumen of a vessel of a living being,
comprising a generally tubular biodegradable main body, having (a) an exterior surface for
contacting the vessel on insertion of the stent; and (b) an interior surface contacting a
fluid passing through the vessel lumen; with the main body made from an array of individual
biodegradable materials (IBM) having individual degradation rates; the IBM incorporating a
drug and releasing it into the lumen of the vessel at a rate controlled by the rates of
degradation of the biodegradable materials; is new., USE/ADVANTAGE - A variety of medical
situations require expansion and support of a constricted vessel and to maintain an open
passageway. The device is used in these situations for concurrent admin. of bioactive drugs,
including fibronectin, which accelerates cell growth surrounding the stent, laminin,
elastin, collagen, intergrins, heparin or its fragments, aspirin, coumadin, tissue
plasminogen activator, urokinase, streptokinase, hirudin, antiproliferatives, metholrexate,
cisplatin, fluorouracil, adriamycin, ascorbic acid, carotene vitamins B or E,
antimetabolites, thromboxane inhibitors, antiinflammatory drugs, beta- and calcium channel
blockers, genetic materials, including DNA or RNA fragments or complete expression genes,
carbohydrates, and proteins, including antibodies, lymphokines, ingrowth factors,
prostaglandins and leukotrienes. The stent is biocompatible, and safely degrades in a
controlled manner, which is varied by the compsn. of the IBM., A biodegradable
self-expanding stent for insertion into a lumen of a vessel of a living being. The stent is
completely biodegradable and comprises (a) a tubular biodegradable main body surrounded by
an array consisting of individual materials with individual rates of degradation contg.
drugs which are released at controlled rates; (b) the body including a slot extending
lengthwise through the body and being defined by opposing edges of the main body whereby
opposing edges must be moved toward each other under compression in order to transport the
stent through a vessel; and the array being annularly aligned oriented fibres disposed about
and attached to the main body and so oriented to provide self-expanding sprung force in an
outward radial direction to increase effective dia., ADVANTAGE - Simultaneous support of
drug vessels and drug administration., A stent having a generally tubular main body formed
from a coiled strip for insertion into a lumen of a vessel of a living being wherein the
main body includes an exterior surface for contacting the vessel when the main body is
placed in a living being, said coiled strip including a cambered interior surface contacting
a fluid passing through the lumen of the vessel, said coiled strip including a substantially
flat exterior surface to which said cambered interior surfaces abuts, said cambered interior
surface including a leading end facing a direction of flow and a trailing end wherein the
leading end is immediately adjacent a wall of the vessel and the trailing end is immediately
adjacent the wall of the vessel.

84. Document ID: US 5851794 A, WO 9207002 A1, AU 9187518 A, FI 9202865 A, EP 506923 A1, NO 9202421 A, JP 05505943 W, HU 64369 T, AU 652587 B, EP 506923 B1, DE 69120390 E, ES 2090357 T3, NO 9700113 A, IE 76292 B
L10: Entry 84 of 86

File: DWPI

Dec 22, 1998

DERWENT-ACC-NO: 1992-167099
DERWENT-WEEK: 199907

TITLE: Hybrid DNA molecule encoding S.aureus collagen binding protein - protein is expressed in
E.coli and used for diagnosis e.g. of septic arthritis

PRIORITY-DATA:
1990SE-0003374
October 22, 1990

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 5851794 A	December 22, 1998	N/A	000	C12P021/06
WO 9207002 A1	April 30, 1992	E	040	C07K015/04
AU 9187518 A	May 20, 1992	N/A	000	C07K015/04
FI 9202865 A	June 18, 1992	N/A	000	C07K000/00
EP 506923 A1	October 7, 1992	E	040	C07K015/04
NO 9202421 A	August 20, 1992	N/A	000	C12N015/31
JP 05505943 W	September 2, 1993	N/A	015	C12N015/31
HU 64369 T	December 28, 1993	N/A	000	C07K015/04
AU 652587 B	September 1, 1994	N/A	000	C07K013/00
EP 506923 B1				

June 19, 1996
E
038
C07K014/31
DE 69120390 E
July 25, 1996
N/A
000
C07K014/31
ES 2090357 T3
October 16, 1996
N/A
000
C07K014/31
NO 9700113 A
August 20, 1992
N/A
000
C07K014/31
IE 76292 B
October 8, 1997
N/A
000
C12N015/62

APPLICATION-DATA:
PUB-NO
APPL-DATE
APPL-NO
APPL-DESCRIPTOR
US 5851794A
August 21, 1992
1992US-0861804
Cont of
US 5851794A
May 22, 1995
1995US-0447031
N/A
WO 9207002A1
October 22, 1991
1991WO-SE00707
N/A
AU 9187518A
October 22, 1991
1991AU-0087518
N/A
AU 9187518A
October 22, 1991
1991WO-SE00707
N/A
AU 9187518A
N/A
WO 9207002
Based on
FI 9202865A
October 22, 1990
1991WO-SE00707
N/A
FI 9202865A
June 18, 1992
1992FI-0002865
N/A
EP 506923A1
October 22, 1991
1991EP-0918842
N/A
EP 506923A1
October 22, 1991
1991WO-SE00707
N/A
EP 506923A1
N/A
WO 9207002
Based on
NO 9202421A
October 22, 1991
1991WO-SE00707
N/A
NO 9202421A
June 19, 1992
1992NO-0002421
N/A
JP05505943W
October 22, 1991
1991JP-0517169
N/A
JP05505943W
October 22, 1991
1991WO-SE00707
N/A
JP05505943W
N/A
WO 9207002
Based on
HU 64369T
October 22, 1991
1991WO-SE00707
N/A
HU 64369T
October 22, 1991
1992HU-0002074
N/A
HU 64369T
N/A
WO 9207002
Based on
AU 652587B
October 22, 1991
1991AU-0087518
N/A
AU 652587B
N/A
AU 9187518
Previous Publ.
AU 652587B
N/A
WO 9207002
Based on
EP 506923B1
October 22, 1991
1991EP-0918842
N/A
EP 506923B1
October 22, 1991
1991WO-SE00707
N/A
EP 506923B1
N/A
WO 9207002
Based on
DE69120390E
October 22, 1991
1991DE-0620390
N/A
DE69120390E
October 22, 1991
1991EP-0918842
N/A
DE69120390E
October 22, 1991
1991WO-SE00707
N/A
DE69120390E
N/A
EP 506923
Based on
DE69120390E
N/A
WO 9207002
Based on
ES 2090357T3
October 22, 1991
1991EP-0918842
N/A
ES 2090357T3

N/A
EP 506923
Based on
NO 9700113A
October 22, 1991
1991WO-SE00707
N/A
NO 9700113A
June 19, 1992
1992NO-0002421
Div ex
NO 9700113A
January 10, 1997
1997NO-0000113
N/A
IE 76292B
October 22, 1991
1991IE-0003694
N/A

INT-CL (IPC): C07H 21/04; C07K 0/00; C07K 3/12; C07K 13/00; C07K 14/31; C07K 15/04; C12N 1/20;
C12N 15/09; C12N 15/31; C12N 15/62; C12N 15/70; C12P 21/02; C12P 21/06; C12R 1/19

IN: GUSS, B M, HOOK, M, JONSSON, H, LINDBERG, K M, PATTI, J, SIGNAS, L C, SWITALSKI,
L M, HOEOEK, M, SIGNAES, L C, SWITALSKIL, L M, GUSS, B, HOEOK, M, JOENSSON, H, LINDBERG, M,
SIGNAES, C, SWITALSKI, L

AB: A hybrid DNA molecule (I) comprises a nucleotide sequence from S. aureus encoding
a protein or polypeptide with collagen binding activity., Also new are: (1) a plasmid or
phage comprising (I); (2) an E coli strain expressing said collagen binding protein; (3) a
method for producing a collagen binding protein or polypeptide comprising:- (a) introducing
at least one (I) into a microorganism; (b) cultivating said microorganism in a growth
promoting medium; and (c) isolating the protein by ion exchange chromatography, ammonium
sulphate precipitatio n and gel filtration; (4) a chemical synthesis method for producing a
collagen binding protein or polypeptide where an aminoacid sequence based on (I) is built up
step-wise, starting with a C-terminal serine and ending with an N-terminal alanine, and (5)
the protein encoded by (I)., USE - (I) is used to produce active purified collagen binding
protein. Gene probes can be used to diagnose the presence of the collagen binding protein
gene in clinical S. aureus isolates e.g. in a patient with septic arthriti, A plasmid
pSAC104 as contained in the E.coli TG1 having the deposit number DSM 6199., A hybrid DNA
molecule (I) comprises a nucleotide sequence from S. aureus encoding a protein or
polypeptide with collagen binding activity., Also new are: (1) a plasmid or phage comprising
(I); (2) an E coli strain expressing said collagen binding protein; (3) a method for
producing a collagen binding protein or polypeptide comprising:- (a) introducing at least
one (I) into a microorganism; (b) cultivating said microorganism in a growth promoting
medium; and (c) isolating the protein by ion exchange chromatography, ammonium sulphate
precipitatio n and gel filtration; (4) a chemical synthesis method for producing a collagen
binding protein or polypeptide where an aminoacid sequence based on (I) is built up
step-wise, starting with a C-terminal serine and ending with an N-terminal alanine, and (5)
the protein encoded by (I)., USE - (I) is used to produce active purified collagen binding
protein. Gene probes can be used to diagnose the presence of the collagen binding protein
gene in clinical S. aureus isolates e.g. in a patient with septic arthriti

85. Document ID: WO 9108230 A, AU 9169145 A, US 5180808 A
L10: Entry 85 of 86
File: DWPI
Jun 13, 1991

DERWENT-ACC-NO: 1991-193156
DERWENT-WEEK: 199126

TITLE: Versican proteoglycan and nucleic acid - having hyaluronic acid binding region and used in
e.g.. tissue reconstruction

PRIORITY-DATA:
1989US-0441179
November 27, 1989

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9108230 A	June 13, 1991	N/A	000	N/A
AU 9169145 A	June 26, 1991	N/A	000	N/A
US 5180808 A	January 19, 1993	N/A	016	C07K003/00

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	APPL-DESCRIPTOR
US 5180808A	November 27, 1989	1989US-0441179	N/A

INT-CL (IPC): C07H 15/12; C07K 3/00; C07K 13/00; C07K 15/14; C12N 15/12; C12P 21/08; C12Q 1/68;
G01N 33/53

IN: RUOSLAHTI, E I, RUOSLAHTI, E

AB: The following are claimed: (A) as a prod. of recombinant DNA, versican having a
specified aminoacid sequence; (B) an isolated nucleic acid sequence which encodes versican;
(C) a nucleic acid probe, comprising fragments of the DNA sequence of versican core protein

shown, the fragments being sufficiently identical to versican encoding nucleic acid to
permit its detection by nucleic acid hybridisation but derived from regions non-homologous
with the sequences of large aggregating cartilage proteoglycans; (D) antibodies prepd.
against the NH2-terminal domain or glycosaminoglycan attachment domain of versican; (E) an
isolated nucleic acid which encodes hyaluronic acid binding, the sequence having the
nucleotide sequence shown, beginning prior to position 447 and ending with the nucleotide at
position 1391; (F) a recombinant protein able to bind hyaluronic acid comprising a peptide
encoded by the nucleotide sequence of (E) expressed with a heterologous peptide; (G) a
method of determg. the presence of hyaluronic acid comprising contacting a sample suspected
of contg. hyaluronic acid with the hyaluronic acid binding region and determg. binding., USE
- The versican can be used to determine the presence of hyaluronic acid and as a vehicle to
bring other molecules into contact with hyaluronic acid. The entire versican molecule can be
used in e.g. tissue reconstruction., Isolated versican core protein as a product of
recombinant DNA, has the 240g amino acid sequence specified and binds to hyaluronic acid.,
Also claimed are an isolated nucleic acid sequence encoding the protein and antibodies to
the protein., USE/ADVANTAGE - Versican is fibroblast proeoglycan, useful for detecting the
presence of hyaluronic acid in immunohistochemistry.

86. Document ID: WO 9105802 A, CA 2027259 A, AU 9066481 A, EP 448704 A, JP 04502336 W, US 5171574 A, AU 648997 B, EP 448704 A4
L10: Entry 86 of 86
File: DWPI
May 2, 1991

DERWENT-ACC-NO: 1991-148697
DERWENT-WEEK: 200014

TITLE: Osteogenic device for implantation in a mammal - comprising a matrix of treated collagen
particles and a protein which induces bone formation

PRIORITY-DATA:
1990US-0569920
August 20, 1990
1989US-0422699
October 17, 1989
1990US-0483913
February 22, 1990
1989US-0315342
February 23, 1989
1989US-0422613
October 17, 1989

PATENT-FAMILY:
PUB-NO
PUB-DATE
LANGUAGE
PAGES
MAIN-IPC

WO 9105802 A
May 2, 1991
N/A
000
N/A

CA 2027259 A
April 18, 1991
N/A
000
N/A

AU 9066481 A
June 15, 1991
N/A
000
N/A

EP 448704 A
October 2, 1991
N/A
000
N/A

JP 04502336 W
April 23, 1992
N/A
000
C07K015/06

US 5171574 A
December 15, 1992
N/A
022
A61F002/02

AU 648997 B
May 12, 1994
N/A
000
C07K013/00

EP 448704 A4
July 8, 1992
N/A
000
N/A

APPLICATION-DATA:
PUB-NO
APPL-DATE
APPL-NO
APPL-DESCRIPTOR

EP 448704A
October 15, 1990
1990EP-0916655
N/A

JP 04502336W
October 15, 1990
1990JP-0515578
N/A

JP 04502336W
October 15, 1990
1990WO-US05903
N/A

JP 04502336W
N/A
WO 9105802
Based on

US 5171574A
February 23, 1989
1989US-0315342
CIP of

US 5171574A
October 17, 1989
1989US-0422613
CIP of

US 5171574A
February 22, 1990
1990US-0483913
N/A

US 5171574A
N/A
US 4975526
CIP of

US 5171574A

N/A

US 5011691

CIP of

AU 648997B

October 15, 1990

1990AU-0066481

N/A

AU 648997B

N/A

AU 9066481

Previous Publ.

AU 648997B

N/A

WO 9105802

Based on

EP 448704A4

N/A

1990EP-0916655

N/A

INT-CL (IPC): A61F 2/02; A61K 37/02; A61K 37/12; C07K 3/28; C07K 13/00; C07K 15/00; C07K 15/06;
C07K 17/02; C08J 3/12; C08L 89/04; C09H 1/02; C12N 15/00

IN: KUBERASAMPATH, T, OPPERMANN, H, OZKAYNAK, E, PANG, R H L, RUEGER, D C, RIDGE, R
J, KUBERASAMP, T, OPPERMAN, H

AB: An osteogenic device for implantation in a mammal comprises (a) a biocompatible,
in vivo biodegradable matrix of mineral-free, delipidated Type I insol. bone collagen
particles, depleted in noncollagenous protein and (b) a protein (I) produced by the
expression of recombinant DNA in a mammalian cell, (I) comprising 2 oxidised subunits, the
amino acid sequence of each subunit being sufficiently duplicative of the amino acid
sequence shown (OP1-16V) such that the dimeric species comprising the subunits has a
conformation that is capable of inducing endochondral bone formation in a mammal when
disposed within the matrix and implanted in the mammal., An osteogenic protein expressed
from recombinant DNA in a mammalian host cell and capable of inducing endochondral bone
formation in a mammal when disposed within a matrix implanted in the mammal, comprises (I).
Also claimed are a biocompatible, in vivo biodegradable matrix for implantation in a mammal,
an osteogenic protein expressed from recombinant DNA in a mammalian host cell, and a
biocompatible, in vivo biodegradable matrix for implantation., USE/ADVANTAGE - The collagen
particles are treated to increase the intraparticle porosity and the surface area of the
particles. The matrix obtd. may be combined with osteogenic protein to induce endochondral
bone formation reliably and reproducibly in a mammalian body. The osteogenic device can
induce at the locus of the implant the full developmental cascade of endochondral bone
formation including vascularisation, mineralisation and bone marrow differentiation. (I) has
bone-inducing activity which is highly reproducible and dose dependent., An osteogenic
device for implantation in a mammal comprises (a) a biocompatible, in vivo biodegradable
matrix of mineral-free, delipidated Type I insol. bone collagen particles, depleted in
noncollagenous protein and (b) a protein (I) produced by the expression of recombinant DNA
in a mammalian cell, (I) comprising 2 oxidised subunits, the amino acid sequence of each
subunit being sufficiently duplicative of the amino acid sequence shown (OP1-16V) such that
the dimeric species comprising the subunits has a conformation that is capable of inducing
endochondral bone formation in a mammal when disposed within the matrix and implanted in the
mammal., An osteogenic protein expressed from recombinant DNA in a mammalian host cell and
capable of inducing endochondral bone formation in a mammal when disposed within a matrix
implanted in the mammal, comprises (I). Also claimed are a biocompatible, in vivo
biodegradable matrix for implantation in a mammal, an osteogenic protein expressed from
recombinant DNA in a mammalian host cell, and a biocompatible, in vivo biodegradable matrix
for implantation., USE/ADVANTAGE - The collagen particles are treated to increase the
intraparticle porosity and the surface area of the particles. The matrix obtd. may be
combined with osteogenic protein to induce endochondral bone formation reliably and
reproducibly in a mammalian body. The osteogenic device can induce at the locus of the
implant the full developmental cascade of endochondral bone formation including
vascularisation, mineralisation and bone marrow differentiation. (I) has bone-inducing
activity which is highly reproducible and dose dependent., Matrix for implantation in a
mammal comprises biodegradable biocompatible, mineral-free delipidated type-1 insoluble bone
collagen particles depleted in non-collagenous protein and treated to have an increased
intra particle porosity and surface area. The bone collagen is pref. xenogenic to the host
and is treated with a collagen fibril modifying agent. It has an increased intrusion vol.
pref. 25 esp. 50% increased. The collagen has an increased number of pores and micropits
esp. having a mean dia. of 1-100 micron and the surface area is at least doubled as measured
by the BET method. The matrix pref. further comprises inter adhered particles defining
interstices dimensioned to permit influx proliferation and differentiation of migratory
cells from the body of the mammalian host. The matrix also comprises a dispersed osteogenic
protein so that the matrix is capable of inducing endochondral bone formation when implanted
into the host. The matrix is pref. shaped to span a non-uniform fracture., Alternatively, a
therapeutic drug may be adsorbed onto the surface of the matrix for sustained release in a
mammalian host., USE/ADVANTAGE - The matrix is biocompatible and implantable, being absorbed
naturally in vivo with minimal immunological reaction. It may be used as an allogenic or
xenogenic implant for use as an osteosynthesis device, a bone particle coating for
implantable prostheses etc

chlorocatechol degradation gene cloning and DNA sequence comparison
AUTHOR: Ghosal D; +You I S
CORPORATE SOURCE: Department of Biology, California State University,
Fresno, CA 93740-0073, USA.
JOURNAL: Gene (83, 2, 225-32) %%%1989%%%
CODEN: GENED6
LANGUAGE: English
ABSTRACT: Alcaligenes eutrophus JMP134 harboring plasmid pJP4 grew on both
2,4-D and 3-%%%chlorobenzoic%%% %%%acid%%%, while Pseudomonas putida
AC867 carrying %%%plasmid%%% pAC27 could only utilize 3-chlorobenzoic
acid as the sole C-source. The tfdCDEF operon on plasmid pJP4 and the clcABD operon on plasmid pAC27 encoded enzymes for chlorocatechol
degradation. Similarities in the DNA sequences of the tfdC and clcA genes, encoding pyrocatechase enzymes, were detected. The complete DNA
sequences of the tfdD and clcB genes, encoding chlorocatechol-specific cycloisomerases, were determined. The tfdD gene (1107 bp) was smaller than the clcB gene (1113 bp). The DNA sequences were 63% homologous,
with 62% protein sequence homology. The tfdD and tfdE genes were contiguous in the tfdCDEF operon, whereas the corresponding clcB and clcD genes of the clcABD operon were separated by a long open reading frame of unknown function. The predicted N-terminal protein sequences of the 2 hydrolase-encoding tfdE and clcD genes also showed homology. The structural and nucleotide homologies between the 2 chlorocatechol operons, tfdCDEF and clcABD, suggested their relatedness. (28 ref)

15/3,AB/85 (Item 20 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0096401 DBA Accession No.: 89-14392
Conjugative plasmid coding for the metabolism of 2-chlorobenzoic acid by Pseudomonas aeruginosa - herbicide pesticide degradation
AUTHOR: Singh H; +Kahlon R S
CORPORATE SOURCE: Department of Microbiology, College of Basic Sciences and
Humanities, Punjab Agricultural University, Ludhiana-141 004, India.
JOURNAL: MIRCEN J.Appl.Microbiol.Biotechnol. (5, 2, 255-58) %%%1989%%%
CODEN: MJABEY
LANGUAGE: English
ABSTRACT: A 2-chlorobenzoic acid-utilizing strain of Pseudomonas aeruginosa
B16 was isolated from soil by enrichment culture with 2-chlorobenzoic acid. Chloride ions were not released, and accumulation of chlorocatechol and disappearance of 2-chlorobenzoic acid were concomitant with growth of the culture. The characteristic of 2-chlorobenzoic acid utilization as sole C-source was lost spontaneously, and also after treatment with growth-limiting concentrations of mitomycin-C. Genes encoding 2-chlorobenzoic acid degradation were transferrable to negative variants by conjugation. Thus present evidence shows that the metabolism of 2-%%%chlorobenzoic%%% %%%acid%%% in P. aeruginosa is %%%plasmid%%%
-determined. (13 ref)

15/3,AB/86 (Item 21 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0096392 DBA Accession No.: 89-14383
Survival of Pseudomonas putida UWC1 containing cloned catabolic genes in a
model activated-sludge unit - 3-chlorobenzoic acid degradation; waste-disposal
AUTHOR: McClure N C; Weightman A J; Fry J C
CORPORATE SOURCE: School of Pure and Applied Biology, University of Wales
College of Cardiff, PO Box 915, Cardiff CF1 3TL, Wales, UK.
JOURNAL: Appl.Environ.Microbiol. (55, 10, 2627-34) %%%1989%%%
CODEN: AEMIDF
LANGUAGE: English
ABSTRACT: The survival of 3-chlorobenzoate (3CB)-degrading Pseudomonas
putida UWC1 harboring recombinant plasmid pD10 was investigated in a laboratory scale activated sludge unit (ASU). The ASU was aerated at 250 ml/min and agitated at 100 rpm for 8 wk. The feed comprised domestic waste-water supplemented with artificial sewage. From day 31 onward, 3CB was introduced into the ASU either as a single shock load directly into the aeration chambers, or from day 40 as a constant input with the feed. P. putida UWC1 (pD10) was inoculated directly into the mixed liquor. The ASU maintained a healthy, diverse protozoal population throughout the experiment, and the introduced strain did not adversely affect the functioning of the unit. Although plasmid pD10 was stably maintained in the host bacterium, the introduced strain did not enhance 3CB degradation in the ASU. Results from plate filter matings indicated that bacteria present in the activated sludge population could act as recipients for plasmid pD10 and actively expressed genes carried on the plasmid. Some of these strains gave higher rates of 3CB breakdown than did strain UWC1 (pD10) in batch culture. (52 ref)

15/3,AB/87 (Item 22 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0088402 DBA Accession No.: 89-06393
Cloning of bacterial genes specifying degradation of 4-chlorobiphenyl from Pseudomonas putida OU83 - pesticide degradation and pollutant degradation; 3-phenylcatechol-dioxygenase gene cloning and expression in Escherichia coli
AUTHOR: Khan A; +Walia S
CORPORATE SOURCE: Department of Biological Sciences, Oakland University,
Rochester, Michigan 48309-4401, USA.
JOURNAL: Appl.Environ.Microbiol. (55, 4, 798-805) %%%1989%%%
CODEN: AEMIDF
LANGUAGE: English
ABSTRACT: Genes encoding 4-chlorobiphenyl degradation were cloned in
Pseudomonas putida AC812 from P. putida OU83 using broad host range
cosmid pCP13 as vector. Clones were identified from 3-phenylcatechol-dioxygenase activity. Positive recombinant cosmid pOH83, cosmid pOH84, cosmid pOH85, cosmid pOH87 and cosmid pOH88 grew
in synthetic culture medium containing 4-chlorobiphenyl as C-source. Mapping of the cosmids showed inserts from 6-30 kb. GC-MS analysis of metabolites of a cosmid pOH88 clone incubated with 4-chlorobiphenyl and 4'-chloro- 3-phenylcatechol showed formation of 4-chlorobenzoic acid and %%%benzoic%%% %%%acid%%%. Thus the cloned %%%DNA%%% contained genes
encoding chlorobiphenyl-dioxygenase (cbpA), dihydrodiol-dehydrogenase (cbpB), 4'-chloro- 3-phenylcatechol-dioxygenase (cbpC), a meta-cleavage compound (a chloro derivative of 2-hydroxy- 6-oxo- 6-phenylhexa-2,4-dienoate) hydrolase (cbpD) and a new dechlorinating activity. The 3-phenylcatechol-dioxygenase gene was subcloned and expressed in Escherichia coli HB101 using plasmid pUC19, and had substrate specificity only for 3-phenylcatechol and 4'-chloro 3-phenylcatechol. (48 ref)

15/3,AB/88 (Item 23 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0086575 DBA Accession No.: 89-04566
Phenoxyacetic acid degradation by the 2,4-dichlorophenoxyacetic acid (TFD) pathway of plasmid pJP4: mapping and characterization of the TFD regulatory gene, tfdR - 2,4-D and 3-chlorobenzoic acid pesticide degradation in Alcaligenes eutrophus; gene cloning and expression in Pseudomonas spp.
AUTHOR: Harker A R; +Olsen R H; Seidler R J
CORPORATE SOURCE: Department of Microbiology and Immunology, University of
Michigan Medical School, Ann Arbor, Michigan 48109, USA.
JOURNAL: J.Bacteriol. (171, 1, 314-20) %%%1989%%%
CODEN: JOBAAY

LANGUAGE: English
ABSTRACT: Alcaligenes eutrophus JMP134 plasmid pJP4 contained genes for
3-chlorobenzoic acid and 2,4-D degradation. A derivative, plasmid pRO101, was constructed by insertion of transposon Tn1721 into a nonessential region. After conjugation with plasmid pRO101, A. eutrophus and some Pseudomonas spp. grew on 2,4-D. Transconjugants with
endogenous phenol-2-monooxygenase (EC-1.14.13.7) degraded phenoxyacetic
acid (PAA) in the presence of 2,4-D or 3-chlorobenzoic acid. Transconjugant mutant Pseudomonas putida PPO300 grew on PAA as sole
C-source in the absence of inducer. The isolate carried mutant plasmid pRO103, with a deleted 3.9 kb fragment. Plasmid pRO103 constitutively expressed the 2,4-D pathway, allowing PAA metabolism in the absence of 2,4-D. Complementation of plasmid pRO103 in trans by the deletion fragment showed that a negative control-regulatory gene (tfdR) was on the BamHI E fragment of plasmid pRO101. The tfdA monooxygenase gene was
subcloned on a 3.5 kb fragment. The subclone constitutively expressed the tfdA gene and allowed strain PPO300 to grow on PAA. Monooxygenase
activity was feedback-inhibited by phenols. (21 ref)

15/3,AB/89 (Item 24 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0083233 DBA Accession No.: 89-01224
Kinetics of benzoate-induced loss of the TOL plasmid from Pseudomonas putida MT15 during growth in chemostat culture - %%%benzoic%%% %%%acid%%% effect on %%%plasmid%%% stability
AUTHOR: Stephens G M; Dalton H
CORPORATE SOURCE: Department of Chemical Engineering, UMIST, PO Box 88,
Manchester, M60 1QD, UK.
JOURNAL: FEMS Microbiol.Lett. (55, 2, 175-80) %%%1988%%%
CODEN: FMLED7
LANGUAGE: English
ABSTRACT: Pseudomonas putida MT15 was cultivated under potassium-limitation
in a chemostat at a dilution rate of 0.1/hr with excess glucose as sole energy and C-source. When a steady-state had been reached, 5 mM benzoate was added resulting in a gradual decrease in the dissolved oxygen tension from 62% to 34% over 1.5 hr possibly due to benzoate oxidation. At the same time, 2-hydroxymuconic semialdehyde (HMSA) began
to accumulate reaching a maximum after 2.5 hr. After 60 generations, approximately 100% TOL plasmid loss was detected. Benzoate appeared to
inhibit the growth of plasmid-containing cells. When benzoate was added to a glucose-limited culture of strain MT15 growing at a dilution rate of 0.1/hr, the dissolved oxygen tension fell from 36% to 17% over 15 min. The HMSA concentration reached a maximum after 2.2 hr and no residual benzoate was detected after 7.4 hr. A stable mixed population of deletants (80%) and plasmid-free cells (20%) was selected after 15 generations. Plasmid-free cells in these cultures displayed a growth rate disadvantage and their appearance was entirely due to benzoate-induced segregational instability of the plasmid. (12 ref)

15/3,AB/90 (Item 25 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0079711 DBA Accession No.: 88-10560
Catabolic instability, plasmid gene deletion and recombination in Alcaligenes sp. BR60 - role in chlorobenzoate degradation
AUTHOR: Wyndham R C; Singh R K; Straus N A
CORPORATE SOURCE: Department of Biology, Carleton University, Ottawa,
Ontario, K1S 5B6, Canada.
JOURNAL: Arch.Microbiol. (150, 3, 237-43) %%%1988%%%
CODEN: AMICCW
LANGUAGE: English
ABSTRACT: Alcaligenes sp. BR60, a landfill runoff isolate, contained an 85 kb catabolic plasmid, pBR60, conferring 3-chlorobenzoate degradation (3Cba). A high frequency of spontaneous 3Cba-mutants (3.2%/cell/generation) appeared, due to deletion of a 14.1 kb fragment from plasmid pBR60 to give plasmid pBR40. Cloned EcoRI and HindIII
fragments covering the entire deletion region were isolated, and hybridization and mapping showed the deleted DNA to be continuous. When
the broad-host-range mobilizing plasmid R68.45 was introduced into Alcaligenes sp. BR60, 30% recombinants lost plasmid pBR60 but retained the Cba+ phenotype. Probing with a deletion fragment showed that pBR60 was inserted in the genome. Alcaligenes sp. BR60 mutants which grew on 4-chlorobenzoate (4Cba), releasing chloride (Alcaligenes sp. BR611), appeared at a spontaneous frequency of 0.00007%/cell/generation. They also grew on 3Cba, but not on 2Cba or 3,5-dichlorobenzoic acid. BR611 had catabolic instability, losing both 3Cba and 4Cba phenotypes at a frequency of 7.5%. A similar deletion process to that in BR60 was responsible. (33 ref)

15/3,AB/91 (Item 26 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0061090 DBA Accession No.: 87-05438
Cloning and expression in Escherichia coli of a Klebsiella ozaenae plasmid-borne gene encoding a nitrilase specific for the herbicide bromoxynil - for use in herbicide pesticide-degradation
AUTHOR: Stalker D M; McBride K E
CORPORATE AFFILIATE: Calgene
CORPORATE SOURCE: Calgene, Inc., Davis, California 95616, USA.
JOURNAL: J.Bacteriol. (169, 3, 955-60) %%%1987%%%
CODEN: JOBAAY
LANGUAGE: English
ABSTRACT: An enzyme (nitrilase) (EC-3.5.5.1) that converts the herbicide
bromoxynil (3,5-dibromo- 4-hydroxybenzonitrile) to its metabolite 3,5-dibromo- 4-%%%hydroxybenzoic%%% %%%acid%%% was shown to be
%%%plasmid%%% encoded in the natural soil isolate Klebsiella ozaenae.
The bromoxynil-specific nitrilase was expressed in Escherichia coli by direct transfer and stable maintenance in E. coli of a naturally occurring 82-kb K. ozaenae plasmid. Irreversible loss of the ability to metabolize bromoxynil both in E. coli and K. ozaenae was associated with the conversion of the 82-kb plasmid to a 68-kb species. In E. coli this conversion was the result of a host recA+-dependent recombinational event. A gene, designated bxn, encoding the bromoxynil-specific nitrilase was constitutively expressed in K. ozaenae and E. coli and subcloned on a 2.5 kb PstI DNA segment. The polarity and the location of the gene were determined by assaying hybrid constructs of the bromoxynil-specific nitrilase gene fused with the heterologous lac promoter. (31 ref)

15/3,AB/92 (Item 27 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0060823 DBA Accession No.: 87-05171
Gene organization of the first catabolic operon of TOL plasmid pWW53: production of indigo by the xylA gene product - toluene conversion to benzoate by Pseudomonas spp.
AUTHOR: Keil H; Saint C M; +Williams P A
CORPORATE SOURCE: Department of Biochemistry and Soil Science, University
College of North Wales, Bangor, Gwynedd LI57 2UW, U.K.
JOURNAL: J.Bacteriol. (169, 2, 764-70) %%%1987%%%
CODEN: JOBAAY
LANGUAGE: English
ABSTRACT: The entire operon coding for the enzymes responsible for conversion of toluenes to %%%benzoic%%% %%%acid%%% has been cloned from
TOL %%%plasmid%%% pWW53 and the position of the genes accurately
located. The coding region was 7.4 kb long, and the gene order was operator-promoter region (OP1)-a small open reading frame-xylC (1.6 kb)-xylA (2.9 kb)-xylB (1.8 kb). Within the coding region there was

considerable homology with the isofunctional region of the archetypal TOL plasmid pWW0. A central region of 2.8 kb complemented an xylA (for xylene-oxygenase) mutant of Pseudomonas putida mt-2 and was also capable of conferring the ability to convert indole to indigo on strains of Escherichia coli and P. putida. This reaction has been reported previously only for dioxygenases involved in aromatic catabolism but not for monooxygenases. The region encodes xylene-oxygenase activity capable of direct monohydroxylation of indole to 3-hydroxyindole (oxindole), which then spontaneously dimerizes to form indigo. (29 ref)

15/3,AB/93 (Item 28 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0055645 DBA Accession No.: 86-13493
A new pathway of 3-hydroxybenzoic acid catabolism by Pseudomonas putida - effect of biphenyl degradation plasmid pBS241
AUTHOR: Starovoytov I I; Selifonov S A; Nefedova M Y; Adanin V M
CORPORATE SOURCE: Institute of Microbial Biochemistry and Physiology, Academy of Sciences of the USSR, Pushchino, USSR.
JOURNAL: Mikrobiologiya (55, 4, 586-90) %%%1986%%%
CODEN: MIKBA5
LANGUAGE: Russian
ABSTRACT: The catabolism of 3-hydroxybenzoic acid by Pseudomonas putida BS 893 carrying the plasmid for biphenyl degradation (pBS241) and by a plasmid-free variant B2 662 (Bph-) was investigated. During the metabolism of 3-hydroxybenzoic acid by strain BS893 (pBS241) 2 products (products 1 and 2) were isolated after a 48-hr incubation period and an additional product (product 3) was detected after 60 hr. Products 1, 2 and 3 were identified as 2,5-dihydroxybenzoic acid, 2,3-dihydroxybenzoic acid, and catechol. In the catabolism of 3-hydroxybenzoate by strain BS 662 products 1, 2 and 3 were also isolated. There were therefore no differences in the metabolites of the plasmid-containing strain and the eliminant. In cell-free extracts of P. putida 3 enzyme activities were associated with the hydroxylation of 3-hydroxybenzoate: 3-hydroxybenzoate-6-, 3-hydroxybenzoate-4- and 3-hydroxybenzoate- 2-hydroxylases. The presence of 3-hydroxybenzoate-2-hydroxylase activity and the isolation of 2,3-dihydroxybenzoate indicate a new pathway for 3-hydroxybenzoate catabolism in P. putida. (18 ref)

15/3,AB/94 (Item 29 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0045492 DBA Accession No.: 86-03340
Microbial degradation of chlorinated phenols - using e.g. Flavobacterium Pseudomonas and Alcaligenes spp.; metabolic pathways and applications for pollutant treatment
AUTHOR: Steiert J G; Crawford R L
CORPORATE SOURCE: Gray Freshwater Biological Institute/University of Minnesota, P.O. Box 100, County Rds 15 and 19, Navarre, MN 55392, USA.
JOURNAL: Trends Biotechnol. (3, 12, 300-05) %%%1985%%%
CODEN: 8921M
LANGUAGE: English
ABSTRACT: The chlorinated phenols comprise a large group of toxic, man-made chemicals that are serious environmental pollutants. These chlorophenols are used as herbicides, fungicides or general biocides. Examples include pentachlorophenol (PCP), 2,3,4,5-tetrachlorophenol, (2,3,4,5-T), 2,3,4,6-T, 2,3,5,6,-T, 2,3,4-trichlorophenol (2,3,4-T), 2,3,5-T, 2,3,6-T, 2,4,5-T, 2,4,6-T, 3,4,5-T, 2,3-dichlorophenol (2,3-D), 2,4-D, 2,5-D, 2,6-D, 3,4-D and 3,5-D. Microorganisms can degrade many, if not all, of the chlorinated phenols, often using chlorophenol-specific enzymes. Examples are given of the pathways of degradation of 2-chlorophenol and 4-chlorophenol, 2,4-D and 3-chlorocatechol. Dechlorination of chlorinated phenols by PCP-induced resting cells of Flavobacterium, and the growth of Pseudomonas B13, Alcaligenes A7 and the constructed strain Alcaligenes A7-2 on phenol, monochlorophenols and 3-%%%chlorobenzoic%%% %%%acid%%% are described. Recombinant %%%DNA%%% technology is being used to construct novel strains able to degrade a wider range of xenobiotics than the parents and these may be applied for the treatment of soil and water systems. (29 ref)

15/3,AB/95 (Item 30 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0037009 DBA Accession No.: 85-07798
Stability of a catabolic plasmid in continuous culture - TOL plasmid in Pseudomonas putida PPK1
AUTHOR: Keshavarz T; Lilly M D; +Clarke P H
CORPORATE SOURCE: Department of Chemical and Biochemical Engineering, University College London, Torrington Place, London WC1E 7JE, U.K.
JOURNAL: J.Gen.Microbiol. (131, Pt.5, 1193-1203) %%%1985%%%
CODEN: JGMIAN
LANGUAGE: English
ABSTRACT: A wild-type strain of Pseudomonas putida PPK1 (carrying a non-conjugative TOL plasmid) was grown in continuous culture under carbon-limitation with m-toluic acid as growth substrate. When the medium was changed to %%%benzoic%%% %%%acid%%% a %%%plasmid%%%-free strain appeared after about 100 hr. After this event the proportion of plasmid-containing bacteria declined rapidly and about 1% of the total population retained the plasmid after 600 hr growth under benzoate-limitation. When m-toluate was returned as substrate plasmid-free bacteria disappeared and the TOL+ population recovered to 100%. The plasmid in the wild-type strain was stably maintained during 500 hr of chemostat growth under succinic acid limitation. Tol+ strains re-isolated from continuous culture under benzoate-limitation retained their TOL plasmids for longer periods. It is suggested that plasmid loss is related to a failure in the control of partitioning at cell division. (33 ref)

15/3,AB/96 (Item 31 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0035957 DBA Accession No.: 85-06746
Genes specifying degradation of 3-chlorobenzoic acid in plasmids pAC27 and pJP4 - homology of Pseudomonas sp. and Alcaligenes eutrophus plasmid genes and mechanism of gene expression
AUTHOR: Ghosal D; You I S; Chatterjee D K; Chakrabarty A M
CORPORATE SOURCE: Department of Microbiology and Immunology, University of Illinois Medical Center, Chicago, IL 60612, USA.
JOURNAL: Proc.Natl.Acad.Sci.U.S.A. (82, 6, 1638-42) %%%1985%%%
CODEN: PNASA6
LANGUAGE: English
ABSTRACT: Complete degradation of 3-chlorobenzoic acid by Pseudomonas putida is specified by plasmid pAC27 (a deletion derivative of pAC25), while plasmid pJP4 present in Alcaligenes eutrophus encodes degradation of 3-chlorobenzoate and 2,4-D. Cloning data identified the location of at least 3 structural genes for pyrocatechase II, cycloisomerase II and hydrolase II involved in 3-chlorobenzoate degradation on a 4.2 kb BglII fragment of pAC27 and in the 10 kb BamHI/EcoRI fragment of pJP4. These 2 regions showed detectable homology. However, the evolutionary divergence of the 2 systems was shown by their modes of expression. The 3-chlorobenzoate genes in plasmid pAC27 were readily expressed when transferred within Ps. spp. The same set of genes in pJP4 were efficiently expressed only after substantial genetic rearrangement in the plasmid, presumably via repetitive sequences that are present on plasmid pJP4 in both direct and inverted orientations. (10 ref)

15/3,AB/97 (Item 32 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0032657 DBA Accession No.: 85-03446
Genetic and physical map of the 2,4-dichlorophenoxyacetic acid-degradative plasmid pJP4 - of Alcaligenes eutrophus; herbicide and pesticide degradation
AUTHOR: Don R H; +Pemberton J M
CORPORATE SOURCE: Department of Microbiology, University of Queensland, St. Lucia, Australia 4067.
JOURNAL: J.Bacteriol. (161, 1, 466-68) %%%1985%%%
CODEN: JOBAAY
LANGUAGE: English
ABSTRACT: Plasmid pJP4 of Alcaligenes eutrophus has a broad host range, is IncP1, is self-transmissible, confers resistance to mercuric ions and phenyl mercury acetate (PMA), and encodes the degradation of 2,4-D, 2-methyl- 4-chlorophenoxyacetic acid, and 3-chlorobenzoic acid (3CB). Insertion mutations of pJP4 were obtained from matings between A. eutrophus JMP222 (pJP4) carrying a genomic insertion of either transposon Tn1771 or transposon Tn5 and a streptomycin-resistant JMP222 derivative. Of 500 Tn1771 insertion mutants, 5 were unable to degrade 2,4-D. 4 Of these mutations were mapped at 3.34 kilobases (kb) and the other at 34.0 kb on the plasmid map. 5 Other mutants were unable to degrade 2,4-D and 3CB. Of these, 2 mutations were mapped at 35.8 kb, 2 at 38.0 kb and 1 at 43.9 kb. Of 400 Tn5 insertion mutants screened, none inactivated 2,4-D or 3CB degradation, while 10 resulted in loss of resistance to both mercuric ions and PMA. A biophysical and genetic map of pJP4 is presented. This will be useful in the construction of bacteria for waste-water treatment and the construction of herbicide-resistant plants. (12 ref)

15/3,AB/98 (Item 33 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0022699 DBA Accession No.: 84-05974
Restriction mapping of a chlorobenzoate degradative plasmid and molecular cloning of the degradative genes - 3-%%%chlorobenzoic%%% %%%acid%%% degradation gene location mapping %%%plasmid%%% pAC27
AUTHOR: Chatterjee D K; Chakrabarty A M
CORPORATE SOURCE: Department of Microbiology and Immunology, University of Illinois Medical Center, 835 South Wolcott Avenue, Chicago, IL 60612, U.S.A.
JOURNAL: Gene (27, 2, 173-81) %%%1984%%%
CODEN: GENED6
LANGUAGE: English
ABSTRACT: Little is known about plasmids that encode degradation of synthetic compounds such as chlorinated aromatics. The genes for the degradation of 3-chlorobenzoic acid (3Cba) are present in a 110 kb plasmid pAC27. A circular map is established using the restriction endonucleases EcoRI (EC-3.1.23.13), HindIII (EC-3.1.23.21), and BglII (EC-3.1.23.10). The map is derived from the results obtained by partial restriction digestion, complete single and double restriction digestion and finally confirmed with hybridization of the digested fragments using different purified fragments as probes. Nick translation and hybridization techniques were employed. Cosmid cloning using pLAFRI was also used. The 3Cba degradative genes were found to be clustered in one region of the map (EcoRI fragment). A portion of the gene cluster appeared to undergo ready recombination with the chromosome, even in a recA host, suggesting the probable transposable nature of such gene cluster. (26 ref)

15/3,AB/99 (Item 34 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0009194 DBA Accession No.: 83-04453
Water soluble vitamins in DNA repair process - studied using Escherichia coli mutants (conference abstract)
AUTHOR: Vasilieva S
CORPORATE SOURCE: Inst. of Chemical Physics, AS USSR., Moscow B-334, USSR.
JOURNAL: Proc.Int.Symp.Genet.Ind.Microorganisms (4 Meet., 45) %%%1982%%%
CODEN: 7853B
LANGUAGE: English
ABSTRACT: The possible involvement of some water soluble vitamins (B,C and para-%%%aminobenzoic%%% %%%acid%%% - PABA) in %%%DNA%%% repair processes in Escherichia coli K-12 treated with NMU and NEU was studied. PABA promoted more effective and accurate recovery of pre-lethal and pre-mutagenic lesions in DNA of E.coli following treatment with mutagens. PABA antimutagenic property selectively depended on the activity of DNA repair enzymes and was most markedly expressed in repair proficient strains, moderetely - in uvrA and only slightly - in polAI, recA and LexA strains. PABA reduced the number of single-strand breaks recorded (but not induced) in DNA of repair-proficient bacterial cells. In vitro PABA interacts with DNA by forming a stable chemical complex - it intercalates into the DNA helix. In toluene-treated cells PABA 2-3 times increased the polymerizing activity of DNA-polymerase I, induced by the mutagens. PABA enhancement of error-proof repair synthesis is the basis of PABA reparagenic activity. (0 ref)

15/3,AB/100 (Item 35 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0008727 DBA Accession No.: 83-04845
Cloning of a Streptomyces griseus paba-synthetase gene and its relationship to candicidin biosynthesis - insertion of p-%%%aminobenzoic%%% %%%acid%%%-synthetase into %%%plasmid%%% vector PIJ41 (conference abstract)
AUTHOR: Gil J A; Hopwood D A
CORPORATE SOURCE: John Innes Inst., Norwich NR4 7UH, England.
JOURNAL: Proc.Int.Symp.Genet.Ind.Microorganisms (4 Meet., 78) %%%1982%%%
CODEN: 7853B
LANGUAGE: English
ABSTRACT: The conversion of chorismic acid to p-aminobenzoic acid (paba) by paba-synthetase is a key early step in the biosynthesis of the polyene macrolide antibiotic candicidin by Streptomyces griseus IMRU 3570; paba is a direct precursor of the p-aminoacetophenone moiety of candicidin. Paba-synthetase is subject to repression by aromatic amino acids and by phosphate, with parallel effects on candicidin synthesis. DNA coding for a S. griseus paba synthetase was cloned in two ways. (1) Using a sulphonomide resistant mutant of S. griseus as donor of DNA, selection was made for cloned fragments able to confer sulphonamide-resistance on S. lividans 66 when inserted into pIJ41, a cloning vector derived from SLP1.2. (2) DNA from the wild-type S. griseus was inserted into pIJ350, a vector derived from pIJ101, and used to restore prototrophy to a paba-requiring auxotroph of S. coelicolor A3(2). These clones are being used to investigate the role of paba-synthetase in the regulation of candicidin biosynthesis by S. griseus. (0 ref)

15/3,AB/101 (Item 36 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0007304 DBA Accession No.: 83-00854
Genetic rearrangements in plasmids specifying total degradation of chlorinated benzoic acids - characterization of plasmids from Pseudomonas putida cells able to utilize 4-chlorobenzoate or 3,5-dichlorobenzoate as sole C-sources
AUTHOR: Chatterjee D K; +Chakrabarty A M
CORPORATE SOURCE: Department of Microbiology and Immunology, University of Illinois at the Medical Center, Chicago, Illinois 60612, USA.
JOURNAL: Mol.Gen.Genet. (188, 2, 279-85) %%%1982%%%
CODEN: MGGEAE
LANGUAGE: English
ABSTRACT: Growth in a chemostat of the 3-chlorobenzoate-positive Pseudomonas putida cells harboring the plasmid pAC25, in presence of cells harboring the TOL plasmid, yielded cells that could utilize 4-chlorobenzoate (4Cba). Isolation of plasmid DNA from such cells

revealed. the deletion of a 11 kb EcoR1 fragment from the pAC25 plasmid, a portion TOL plamsmid was also transposed onto the chromosome of such cells. Further enrichment of the 4-chlorobenzoate-positive cells with 3,5-dichlorobenzoate (3,5-Deb) as a sole C-source produced cells that slowly utilized 3,5-dichlorobenzoate. Isolation of plasmid DNA from such cells demonstrated the appearance of a second plasmid (pAC29). Restriction hybridization of pAC29 EcoR1 fragments with pAC25 and TOL showed a segment of the pAC27 plasmid and a fragment from TOL, with further mutational divergence. Isolation of plasmid DNA from 3,5-Deb+ faster growing variants demonstrated the presence of a single type of plasmid, with identical size and EcoR1 digestion profile as pAC27.

15/3,AB/102 (Item 37 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs

0006432 DBA Accession No.: 83-02469
Genetic homology between independently isolated chlorobenzoate-degradative plasmids - isolation and restriction enzyme analysis of 2 chlorobenzoic acid-degradative plasmids from 2 strains of Pseudomonas putida
AUTHOR: Chatterjee D K; Chakrabarty A M
CORPORATE SOURCE: Department of Microbiology and Immunology, University of Illinois Medical Center, Chicago, Illinois 60612, USA.
JOURNAL: J.Bacteriol. (153, 1, 532-34) %%%1983%%%
CODEN: JOBAAY
LANGUAGE: English
ABSTRACT: Chlorobenzoic acid-degradative plasmids were isolated, respectively from Pseudomonas putida AC25 (isolated in the US) and Ps. putida strain B13 (isolated in Germany). A profile of fragments generated after EcoR1 digestion, showed that plasmid pAC25 was 6 kb larger than pB13. Restriction fragments formed after EcoR1, HindIII and Bg1II digestion, were transferred to nitrocellulose paper and hybridized with nick-translated 32P-labeled pAC25 DNA as a probe. All the fragments of pB13 were hybridizable with pAC25. The smaller fragments of pB13 hybridized as well as the fragments of identical mobility with probe pAC25 DNA, suggesting that these fragments were derived by a 6 kb oeletion of the larger fragments of pAC25. Since ooth the chlorobenzoate-degradative plasmids were conjugative, these results suggest that the extra 6 kb portion present in pAC25 is not essential for 3-chlorobenzoic acid degradation or oransfer of the plasmids. (12 ref)
? log

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    Set  Items  Description
    ---  -----  -----------
? s penetration enhancer

     S1     81  PENETRATION ENHANCER
? s dna or plasmid or polynucleotide or (nucleic acid)

       1526897  DNA
        183701  PLASMID
         10632  POLYNUCLEOTIDE
          4804  NUCLEIC ACID
     S2 1604845  DNA OR PLASMID OR POLYNUCLEOTIDE OR
(NUCLEIC ACID)
? s s1 and s2

         81  S1
    1604845  S2
     S3      0  S1 AND S2
? s s3 and py<=1993

<------User Break------>
u!
? s enhance?(3n)penetration

       863304  ENHANCE?
        72019  PENETRATION
     S4   2384  ENHANCE?(3N)PENETRATION
? s s2 and s4

      1604845  S2
         2384  S4
     S5     48  S2 AND S4
? s s5 and py<=1993

Processing
          48  S5
     22710852  PY<=1993
     S6     27  S5 AND PY<=1993
? rd

...completed examining records
     S7     16  RD (unique items)
? t s7/3,ab/1-16


 7/3,AB/1     (Item 1 from file: 5)
DIALOG(R)File  5:Biosis Previews(R)
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09084027  BIOSIS NO.: 199497092397
Hyperthermic potentiation of cisplatin cytotoxicity on solid Ehrlich
  carcinoma.
AUTHOR: Osman Abd El-Moneim Mahmoud; Ahmed Mohamed Mohamed
Sayed; Khayyal
  Mohamed Taky El-Din; El-Merzabani Mahmoud Mohamed(a)
AUTHOR ADDRESS: (a)Cancer Biol. Dep., Natl. Cancer Inst., Kasr El-Aini
St.,
  Fom El-Khalig, Cairo**Egypt
JOURNAL: Tumori  79 (4):p268-272 1993
ISSN: 0300-8916
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Background: Hyperthermia produces marked effects on many
  biochemical parameters of tumor cells and has been reported to potentiate
  the effect of many drugs. We therefore evaluated the possible synergistic
  effect between hyperthermia and cisplatin against solid Ehrlich
  carcinoma. The study was based on the measurement of some biologic
  characteristics in tumor tissues, namely: %%%DNA%%%, RNA, and
protein
  content and their rate of synthesis as parameters for nuclear damage;
  total lipids and cholesterol as parameters for membrane damage;
  acid-phosphatase and acid-ribonuclease as parameters for lysosomal
  damage; and tumor volume as a direct parameter for tumor growth.
Methods:
  Treatment of solid Ehrlich carcinoma by hyperthermia at 43 degree C for
  30 min for 3 successive days produced a 41.5% decrease in tumor volume,
  as well as a significant decrease in nucleic acids, protein contents and
  their rate of synthesis, in total lipids and cholesterol, and in
  acid-phosphatase and acid-ribonuclease. Chemotherapeutic management of
  the tumor by 5 mg/kg times 3 of cisplatin alone showed a continuous
  increase in tumor volume but at a lower rate than that of the untreated
  control. However, when cisplatin was given 1 h prior to hyperthermia, the
  tumor volume was significantly decreased by 82.6%. Results: The effects
  observed on all the investigated parameters were intensified when
  cisplatin was combined with hyperthermia. The results obtained suggest
  that hyperthermia may %%%enhance%%% the %%%penetration%%% of
cisplatin to
  its target site inside the tumor cells due to a membrane-damaging effect.
  The enhanced lethality of cisplatin on tumor cells may also be due to the
  inhibition of %%%DNA%%% repair processes by hyperthermia.


 7/3,AB/2     (Item 2 from file: 5)
DIALOG(R)File  5:Biosis Previews(R)
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08802999  BIOSIS NO.: 199395092350
Reproducible high level infection of cultured adult human hepatocytes by
  hepatitis B virus: Effect of polyethylene glycol on adsorption and
  penetration.
AUTHOR: Gripon Philippe(a); Diot Christian; Guguen-Guillouzo Christiane
AUTHOR ADDRESS: (a)Inserm U49, Unite de Recherches Hepatologiques,
Hopital
  Pontchaillou, 35033 Rennes, Cedex**France
JOURNAL: Virology  192 (2):p534-540 1993
ISSN: 0042-6822
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: We have previously succeeded in infecting normal human
hepatocyte
  primary cultures with hepatitis B virus (HBV). However, infection was
  subject to individual variations even in the presence of dimethyl
  sulfoxide (DMSO), which appeared to increase the amounts of viral
  %%%DNA%%% associated with the cells. In this study, we have defined
  conditions which %%%enhance%%% hepatitis B virus
%%%penetration%%% into
  the cells, and we show that, under these conditions, infection of
  hepatocytes is always possible, regardless of their individual origin. We
  found that addition of polyethylene glycol (PEG) to the cultures
  maintained in the presence of 2% DMSO at the time of infection markedly
  increased the infection process and made it highly reproducible.
  Moreover, both the tissue and species specificity were preserved. This
  increased HBV infection was correlated to increased amount of
  internalized HBV %%%DNA%%% and to enhanced attachment of the
virions.
  From these results it may be assumed that PEG could favor a better
  interaction between virions and cells, resulting in an activated
  internalization of bound viral particles. Data also show that adult human
  hepatocyte primary cultures, which are not equally susceptible to HBV
  infection, are consistently capable of viral replication when the viral
  genome has entered the cells. This suggests that the main limitation of
  the in vitro HBV infection lies in the ability of human hepatocytes to
  specifically bind the viral particles.


 7/3,AB/3     (Item 3 from file: 5)
DIALOG(R)File  5:Biosis Previews(R)
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08066489  BIOSIS NO.: 000093087937
%%%DNA%%% INTERPOLYELECTROLYTE COMPLEXES AS A
TOOL FOR EFFICIENT CELL
  TRANSFORMATION
AUTHOR: KABANOV A V; ASTAFYEVA I V; CHIKINDAS M L;
ROSENBLAT G F; KISELEV V
  I; SEVERIN E S; KABANOV V A
AUTHOR ADDRESS: RES. CENT. MOL. DIAGNOSTICS, USSR
MINISTRY HEALTH,
  SIMPHEROPOLSKY BLVD. 8, MOSCOW 113149.
JOURNAL: BIOPOLYMERS 31 (12). 1991. 1437-1444.
FULL JOURNAL NAME: Biopolymers
```

CODEN: BIPMA
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: A tool was developed for %%%enhancement%%% of %%%plasmid%%% %%%penetration%%% into an intact cell, based on increasing %%%DNA%%% hydrophobicity via inclusion into a soluble interpolyelectrolyte complex (IPC) with polycations. The characteristics of formation of %%%DNA%%% IPC with synthetic polycations [poly (N-ethyl-4-vinylpyridinium) bromide (PVP) and PVP modified with 3% of N-cetyl-4-vinylpyridinium units (PVP-C)] were studied using ultracentrifugation and polyacrylamide gel electrophoresis methods. The conditions were established under which the mixing of %%%DNA%%% and polycation aqueous solutions results in the self-assembly of soluble IPC species. Incorporation of %%%DNA%%% into IPC results in the enhancement of %%%DNA%%% binding with isolated Bacillus subtilis membranes. A considerable increase in the efficiency of transformation of B. subtilis cells with pBC16 %%%plasmid%%% resulted from incorporation of the %%%plasmid%%% into the IPC with PVP and CVP.

7/3,AB/4 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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07014903 BIOSIS NO.: 000089106787
A DEMONSTRATION OF THE INTRINSIC IMPORTANCE OF STABILIZING HYDROPHOBIC BINDING AND NON-COVALENT VAN DER WAALS CONTACTS DOMINANT IN THE NON-COVALENT CC-1065-B-%%%DNA%%% BINDING
AUTHOR: BOGER D L; INVERGO B J; COLEMAN R S; ZARRINMAYEH H; KITOS P A; THOMPSON S C; LEONG T; MCLAUGHLIN L W
AUTHOR ADDRESS: DEP. CHEM., PURDUE UNIV., WEST LAFAYETTE, INDIANA 47907, USA.
JOURNAL: CHEM-BIOL INTERACT 73 (1). 1990. 29-52.
FULL JOURNAL NAME: Chemico-Biological Interactions
CODEN: CBINA
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: The comparative %%%DNA%%% binding properties and cytotoxic activity of CDPIn methyl esters (n = 1-5) vs. PDE-In methyl esters (n = 1-3) are detailed in studies which provide experimental evidence for the intrinsic importance of stabilizing hydrophobic binding and non-covalent van der Waals contacts dominant in the CC-1065/B-%%%DNA%%% minor groove binding. High affinity minor groove binding to %%%DNA%%% was established through: 1) the observation of CDPI3 binding (UV) but not unwinding of supercoiled %%%DNA%%% (.phi. 174 RFI %%%DNA%%%) thus excluding intercalative binding; (2) the observation of CDPI3 binding to T4 phage %%%DNA%%% (UV, .DELTA.Tm) in which the major groove is occluded by glycosylation thus excluding major groove binding; (3) the observation of salt (Na+) concentration independent high affinity CDPI3 binding to poly(dA).cntdot.poly(dT) thus excluding simple electrostatic binding to the %%%DNA%%% phosphate backbone, and further inferred through (4) the observation of an intense induced dichroism (ICD, poly(dA).cntdot.poly(dT) and poly(dG).cntdot.poly(dC) [.phi.]35823 = 24,000 and 23,500). This high affinity minor groove binding is sufficient to produce a potent cytotoxic effect. From thermal denaturation studies and relative bindign constant determinations it was demonstrated that: (1) CDPI3 represents the optimum, binding unit (25.degree. C) within the oligomeric CDPIn agents studied (CDPI3 > CDPI5 .simeq. CDPI4 .gtoreq. CDPI2 > CDPI1); (2) CDPI3 minor groove binding spans five base-pairs or one-half a helix turn of double-stranded %%%DNA%%% which represents the largest accessible binding site available for synchronous binding of the rigid agent termini [poly(dA).cntdot.poly(dT) and poly[d(A-T).cntdot.poly[d(A-T)] agent/base-pair ratio = 0.2], (3) partial bound forms of the larger oligomer agents, i.e. CDPI2-bound CDPI4, constitute productive and releavant %%%DNA%%%/agent complexes; (4) the PDE-I3/%%%DNA%%% complexes are thermodynamically more stable and kinetically more labile than the corresponding CDPIn/%%%DNA%%% complexes, (5) the qualitative and relative quantitative free energies of binding of the agents to %%%DNA%%% follows trends depicted in a quantitative molecular modeling study from which estimates of the gas phase, relative enthalpies binding were available (poly(dA).cntdot.poly(dT) and poly[d(A-T)].cntdot.poly[d(A-T)] > poly(dG).cntdot.poly(dC)/PDE-I3 > CDPI3 > PDE-I2 > CDPI2-bound CDPI4 > CDPI2 > CDPI1); (6) the absence of CDPIn functionality that would permit stabilization of %%%DNA%%%/CDPIn complexes through hydrogen bonding or substantial stabilizing electrostatic interactions suggests that the binding affinity of the agents is derived principally if not exclusively from hydrophobic binding and stabilizing van der Waals contacts (affinity = hydrophobic binding); (7) the CDPIn agents exhibit a substantial preference for A.cntdot.T rich vs. G .cntdot. C rich %%%DNA%%% minor groove binding [CDPIn: Kb [Poly(dA).cntdot.poly(dT)], poly[d(A-T)].cntdot.poly[d(A-T)] > Kb[poly(dG).cntdot.poly(dC)]; CDPI3 (25.degree. C)/.DELTA..DELTA.G.degree. poly(dA).cntdot.poly(dT) vs. poly(dG).cntdot.poly(dC) = -2.6 kcal] which represents preferential binding to minor groove regions in which stabilizing agent/%%%DNA%%% van der Waals contacts would be %%%enhanced%%% with the deeper %%%penetration%%% of the agents into the narrower A.cntdot.T rich %%%DNA%%% minor groove (specificity = accessible hydrophobic binding); and (8) the trends in the cytotoxic potentcy of non-covalent binding agents (CDPIn:CDPI4 > CDPI3 >> CDPI2, CDPI1; PDE-In:PDE-I3 > PDE-I2; CDPIn/PDE-In:PDE-I2 > CDPI2, PDE-I3 > CDPI3) follow the trends depicted for full structure binding of the agents. Consequently, the studies suggest that the antitumor antibiotic (+)-CC-1065 is best represented as a selective alkylating group superimposed upon the rigid CDPI3 skeleton rather than as reactive alkylating agent (CPI) attached to a %%%DNA%%% binding agent (PDE-I2). The initial non-covalent %%%DNA%%% binding of the agent may be expected to exhibit a substantial preference for A.cntdot.T rich %%%DNA%%% minor groove binding that may be attributed to accessible hydrophobic binding and is optimal with the properties and size of the rigid, hytrimer (CDPI3/PDE-I3).

7/3,AB/5 (Item 5 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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06687606 BIOSIS NO.: 000087129792
TOPICAL METHOTREXATE THERAPY FOR PSORIASIS
AUTHOR: WEINSTEIN G D; MCCULLOUGH J L; OLSEN E
AUTHOR ADDRESS: DEP. DERMATOL., CALIFORNIA COLL. MED., UNIV. CALIFORNIA, IRVINE, IRVINE, CALIF. 92717.
JOURNAL: ARCH DERMATOL 125 (2). 1989. 227-230.
FULL JOURNAL NAME: Archives of Dermatology
CODEN: ARDEA
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: In vitro percutaneous %%%penetration%%% of methotrexate is %%%enhanced%%% with 1-dodecylazacycloheptan-2-one (laurocapram [Azone]). Laurocapram-containing methotrexate formulations provide effective local inhibition of epidermal %%%DNA%%% synthesis in the in vivo hairless mouse and minipig models, providing the biochemical rationale for topical use in the treatment of psoriasis. Topical methotrexate (0.1%, 0.5%, and 1%)

in a laurocapram-containing formulation was tested in a two-center double-blind pilot clinical study of 42 patients with plaque psoriasis. Drugs were applied twice a day for six weeks, and lesions were scored weekly for erythema, scale, and elevation. An overall improvement of 50% or more in the combined scores for erythema, scale, and elevation was obtained with 0.1% methotrexate (64% of patients), 0.5% methotrexate (59%), and 1% methotrexate (56%) vs the vehicle alone (25%). These preliminary findings suggest that methotrexate preparations that provide adequate percutaneous absorption may have a beneficial effect in the treatment of psoriasis.

7/3,AB/6 (Item 6 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

06124142 BIOSIS NO.: 000085087294
CGP-4832 A NEW SEMISYNTHETIC RIFAMYCIN DERIVATIVE HIGHLY ACTIVE AGAINST
SOME GRAM-NEGATIVE BACTERIA
AUTHOR: WEHRLI W; ZIMMERMANN W; KUMP W; TOSCH W; VISCHER W; ZAK O
AUTHOR ADDRESS: RES. DEP., PHARM. DIV., CIBA-GEIGY LTD., CH-4002 BASEL,
SWITZ.
JOURNAL: J ANTIBIOT (TOKYO) 40 (12). 1987. 1733-1739.
FULL JOURNAL NAME: Journal of Antibiotics (Tokyo)
CODEN: JANTA
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: CGP 4832 (5) is a new derivative of ribamycin S, showing a very
high degree of activity against certain Gram-negative bacteria, with MICs as much as 400 times lower than those of rifampicin. CGP 4832 and rifampicin inhibit %%%DNA%%%-dependent transcription in vitro to a similar extent, which excludes any differences in their effect on the target enzyme. The most plausible explanation for the potent activity of CGP 4832 is that it penetrates into bacterial cells by way of a specific mechanism. This hypothesis is corroborated by the high rate of mutations leading to bacterial strains resistant against CGP 4832.

7/3,AB/7 (Item 7 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

03917277 BIOSIS NO.: 000076002843
GENE TRANSFER INTO MOUSE LYOMA CELLS BY ELECTROPORATION IN HIGH ELECTRIC
FIELDS
AUTHOR: NEUMANN E; SCHAEFER-RIDDER M; WANG Y; HOFSCHNEIDER P H
AUTHOR ADDRESS: MAX-PLANCK-INSTITUT FUER BIOCHEMIE, D-8033
MARTINSRIED/MUENCHEN, FRG.
JOURNAL: EMBO (EUR MOL BIOL ORGAN) J 1 (7). 1982. 841-846.
FULL JOURNAL NAME: EMBO (European Molecular Biology Organization) Journal
CODEN: EMJOD
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: Electric impulses (8 kV/cm, 5 .mu.S) increased greatly the uptake
of %%%DNA%%% into cells. When linear or circular %%%plasmid%%% %%%DNA%%%
containing the herpes simplex thymidine kinase (TK) gene is added to a suspension of mouse L cells deficient in the TK gene and the cells are then exposed to electric fields, stable transformants are formed that survive in the HAT [hypoxanthine-aminopterin-thymidine] selection medium.
At 20.degree. C after the application of 3 successive electric impulses followed by 10 min to allow %%%DNA%%% entry there resulted 95 (.+-. 3)
transformants per 106 cells and per 1.2 .mu.g %%%DNA%%%. Compared with
biochemical techniques, the electric field method of gene transfer is very simple, easily applicable, and very efficient. Because the mechanism of %%%DNA%%% transport through cell membranes is not known, a simple
physical model for the %%%enhanced%%% %%%DNA%%% %%%penetration%%% into
cells in high electic fields is proposed. According to this electroporation model the interaction of the external electric field with the lipid dipoles of a pore configuration induces and stabilizes the permeation sites and thus enhances cross membrane transport.

7/3,AB/8 (Item 8 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

03850767 BIOSIS NO.: 000075028840
ENHANCED SENSITIVITY TO THE LETHAL AND MUTAGENIC EFFECTS OF PHOTO
SENSITIZING ACTION OF CHLORPROMAZINE IN EDTA TREATED ESCHERICHIA-COLI
AUTHOR: YONEI S; TODO T
AUTHOR ADDRESS: DEP. ZOOLOGY, FAC. SCIENCE, KYOTO UNIV., SAKYO-KU, KYOTO
606, JAPAN.
JOURNAL: PHOTOCHEM PHOTOBIOL 35 (4). 1982. 591-592.
FULL JOURNAL NAME: Photochemistry and Photobiology
CODEN: PHCBA
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: EDTA treatment of E. coli H/r30 (Arg-) enhanced cell sensitivity
to the lethal and mutagenic effects of the photosensitizing action of chlorpromazine (CPZ). The most obvious effect of EDTA on the fluence-survival curve was an elimination of the shoulder. In the absence of EDTA, CPZ plus near-UV radiation did not induce the reversion from arginine-auxotroph to autotroph of E. coli H/r30. When EDTA (5 mM)-treated cells were subjected to CPZ plus near-UV radiation, the induced reversion frequency increased with time of irradiation. The %%%enhanced%%% %%%penetration%%% of CPZ into E. coli cells by EDTA
apparently facilitates the drug binding to %%%DNA%%% within the cells on
near-UV irradiation. This may explain the enhanced photosensitized lethal and mutagenic effects of CPZ.

7/3,AB/9 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

05487999 EMBASE No: 1993256098
Influence of irritants on lymph node cell proliferation and the detection of contact sensitivity to metal salts in the murine local lymph node assay
Ikarashi Y.; Tsukamoto Y.; Tsuchiya T.; Nakamura A.
National Inst of Hygienic Sciences, 18-1 Kamiyoga 1-Chome,Setagaya-ku, Tokyo 158 Japan
Contact Dermatitis (CONTACT DERMATITIS) (Denmark) 1993, 29/3 (128-132)
CODEN: CODED ISSN: 0105-1873
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

Dimethyl sulfoxide (DMSO) and sodium lauryl sulfate (SLS) are known to cause irritation of the skin, and to %%%enhance%%% the %%%penetration%%% of
chemicals into the epidermis. In the present study, the lymph node cell (LNC) proliferative response following exposure to irritants, such as SLS and DMSO, was examined in the murine local lymph node assay (LLNA). Exposure to DMSO or SLS aqueous solution induced a small increase in lymph
node cell proliferation compared with aqueous solution alone. Exposure to SLS in DMSO caused a significant increase in LNC proliferation. Further, the effect of addition of the irritants in a vehicle on the detection of contact sensitivity to metal allergens was examined. Application of potassium dichromate and nickel sulfate in DMSO or SLS aqueous solution caused increases in LNC proliferation. Exposure to metal allergen with SLS in DMSO also induced a significant LNC proliferative response, but did not

induce a significant increase in stimulation index (increase in sup 3H-thymidine incorporation relative to vehicle-treated control group). This was because of increased sup 3H-thymidine incorporation following exposure to SLS-DMSO in the control group. These results suggest that irritants enhance the LNC proliferative responses to metal allergens. The use of SLS in aqueous solution is effective for the detection of sensitivity to water-soluble allergens, such as metal allergens, in the LLNA, as well as the use of DMSO as an application vehicle.

7/3,AB/10 (Item 2 from file: 73)
DIALOG(R)File 73:EMBASE
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04143630 EMBASE No: 1990026172
A new class of antivirals: Antisense oligonucleotides combined with a hydrophobic substituent effectively inhibit influenza virus reproduction and synthesis of virus-specific proteins in MDCK cells
Kabanov A.V.; Vinogradov S.V.; Ovcharenko A.V.; Krivonos A.V.; Melik-Nubarov N.S.; Kiselev V.I.; Severin E.S.
Research C. Molec. Diagnostics, USSR Ministry of Health, Simpheropolsky Boulevard 8,Moscow 113149 Russia
FEBS Letters (FEBS LETT.) (Netherlands) 1990, 259/2 (337-330)
CODEN: FEBLA ISSN: 0014-5793
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

To %%%enhance%%% the %%%penetration%%% of oligonucleotide ('oligo') into
cells, the oligo was combined with the hydrophobic undecyl residue. Using the '%%%DNA%%%-synthesator', we synthesized oligo, complementary to the
loop-forming site of the RNA, encoding polymerase 3 of the influenza virus (type A), and combined it with the undecyl residue added to the 5' terminal phosphate group. It was found that the modified oligo effectively suppresses the influenza A/PR8/34 (H1N1) virus reproduction and inhibits the synthesis of virus-specific proteins in MDCK cells. Under the same conditions, the non-modified antisense oligo and modified nonsense oligo did not affect the virus development.

7/3,AB/11 (Item 3 from file: 73)
DIALOG(R)File 73:EMBASE
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00799321 EMBASE No: 1977144791
Enhancement of rI(n):rC(n) induced interferon production by amphotericin B
Borden E.C.; Leonhardt P.H.
Div. Clin. Oncol., Dept. Hum. Oncol., Univ. Wisconsin Cent. Hlth Sci., Madison, Wis. 53706 United States
Antimicrobial Agents and Chemotherapy (ANTIMICROB. AGENTS CHEMOTHER.)
1976, 9/3 (551-553)
CODEN: AMACC
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH

When mouse L929 cells are treated with amphotericin B before exposure to polyriboinosinic polyribocytidylic acid or polyriboinosinic polyribocytidylic acid dextran, they make significantly more interferon than do cells not receiving amphotericin. This effect may be due to %%%enhanced%%% cell membrane %%%penetration%%% by the %%%polynucleotide%%%.

7/3,AB/12 (Item 4 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2000 Elsevier Science B.V. All rts. reserv.

00525940 EMBASE No: 1976081492
Macromolecular complexes produced by 1,3 propanesultone
Zeldin P.E.; Bhattacharya P.K.; Kubinski H.; Nietert W.C.
Div. Neurosurg., Univ. Wisconsin Sch. Med., Madison, Wis. 53706 United States
Cancer Research (CANCER RES.) 1975, 35/6 (1445-1452)
CODEN: CNREA
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH

1,3 Propanesultone produces in vitro complexes between %%%DNA%%% and
%%%DNA%%%, %%%DNA%%% and RNA, RNA and RNA, %%%DNA%%% and proteins, and
possibly RNA and proteins. All these interactions were detected with a variety of independent analytical techniques. Increased attachment of the 1,3 propanesultone treated %%%DNA%%% to the microsomal membrane and
%%%enhanced%%% absorption to and %%%penetration%%% into Ehrlich ascites
tumor cells were also observed. 1,3 Propanesultone was the second small ring alkylating carcinogen studied in this laboratory that was found to produce such macromolecular complexes. The possibility that these highly diverse structures may be involved in chemical mutagenesis and tumorigenesis is considered.

7/3,AB/13 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2000 Dialog Corporation. All rts. reserv.

07346865 91075736
The %%%enhancement%%% of the %%%penetration%%% of the human
immunodeficiency virus into cells with the aid of a helper virus]
Usilenie proniknoveniia virusa immunodefitsita cheloveka v kletki s pomoshch'iu virusa-pomoshchnika.
Sharova NK; Bukrinskaia AG
Vopr Virusol (USSR) Jul-Aug %%%1990%%%, 35 (4) p312-5, ISSN 0507-4088
Journal Code: XL8
Languages: RUSSIAN Summary Languages: ENGLISH
Document type: JOURNAL ARTICLE English Abstract
Penetration of human immunodeficiency virus (HIV) into the cells of lymphoblastoid T-cell line H9 was studied using 35S-methionine-labeled virus by demonstration of virus-specific proteins in the cytoplasm of the infected cells. Purification of the virus by ultracentrifugation through 30% glycerol was shown to lead to virus aggregation and its partial destruction manifested by the loss of gp120 protein, therefore unlabeled concentrated virus was used mainly with subsequent determination of virus-specific proteins by immune blotting. The addition of Sendai virus inactivated with UV rays to HIV increased the amount of HIV associated with
cells as well as the amount of virus-specific proteins in the cytoplasm of the infected cells.

7/3,AB/14 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2000 Dialog Corporation. All rts. reserv.

06769200 91344701
Hydrophobized antiviral antibodies and antisense oligonucleotides.
Severin ES; Melik-Nubarov NS; Ovcharenko AV; Vinogradov SV; Kiselev VI;
Kabanov AV
Research Center of Molecular Diagnostics, USSR Ministry of Health, Moscow.
Adv Enzyme Regul (ENGLAND) %%%1991%%%, 31 p417-30, ISSN 0065-2571
Journal Code: 2LG
Languages: ENGLISH
Document type: JOURNAL ARTICLE
A method of suppressing virus reproduction in cells has been proposed. The approach consists of affecting the cells with antiviral antibodies artificially hydrophobized with fatty acid residues. Reproduction of influenza viruses in MDCK cells and respiratory-synticial virus in HeLa cells was used as a model to demonstrate that poly- and monoclonal antibodies, modified by 1 or 2 stearic acid residues, are potent, unlike the non-modified antibodies, at inhibiting viral reproduction. The observed phenomenon is apparently due to penetration of hydrophobized antibodies into the cells. Thus, in particular, considerable antiviral activity is exhibited by monoclonal antibodies against NP-protein of influenza virus, which is an antigen accessible to antibodies only inside the infected cells. Hydrophobized antibodies do not affect the kinetics of viral protein synthesis; they block the virus withdrawal from the cells, probably by

interfering with the assembling and budding of virus particles. To %%%enhance%%% %%%penetration%%% of oligonucleotides ("oligos") into cells,
chemical modification of the former at the 5'-end phosphate group by fatty radicals has been suggested. The undecanol-modified oligo namely an oligo complementary to the protein binding sites located at the influenza virus polymerases encoding RNA, was synthesized using a %%%DNA%%%-synthesator.
The above modified oligo effectively suppressed the influenza A/PR8/34 virus reproduction and inhibited synthesis of the virus-specific proteins in MDCK cells. The non-modified antisense oligo and the modified nonsense
oligo did not affect the virus development under the same conditions.

7/3,AB/15 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2000 Dialog Corporation. All rts. reserv.

06654023 92292108
Fluorescent light decreases autoimmunity and improves immunity in B/W mice.
McGrath H Jr; Bak E; Zimny ML; Michalski JP
Department of Medicine, Louisiana State University School of Medicine, New Orleans.
J Clin Lab Immunol (SCOTLAND) Jul %%%1990%%%, 32 (3) p113-6, ISSN
0141-2760 Journal Code: J3K
Languages: ENGLISH
Document type: JOURNAL ARTICLE
Fluorescent light emitted from cool white tubular fluorescent lamps covered with standard acrylic lids decreased autoimmunity and enhanced immunity in the New Zealand Black/New Zealand White F1 hybrid female (B/W)
mouse model of systemic lupus erythematosus (SLE). Thirty-three weeks of daily cool white fluorescent light exposure significantly decreased anti-ds %%%DNA%%% antibody levels and spleen size, and increased lymphocyte
responsiveness to lipopolysaccharide (LPS) in B/W mice depilated to %%%enhance%%% light %%%penetration%%%. Depilation alone had no significant
effect. The immunomodulatory potential of fluorescent light in B/W mice has not been previously appreciated, and may have important implications in SLE.

7/3,AB/16 (Item 1 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0080560 DBA Accession No.: 88-11409
%%%Enhanced%%% oil recovery - %%%penetration%%% of ultramicrobacteria
through model rock cross - compared with Klebsiella pneumoniae (conference abstract)
AUTHOR: MacLeod F A; Lappin-Scott H M; Cusack F; +Costerton J W
CORPORATE SOURCE: The University of Calgary, Ca;gary, Alberta, Canada.
JOURNAL: Abstr.Annu.Meet.Am.Soc.Microbiol. (88 Meet., 313) %%%1988%%%
CODEN: 0005M
LANGUAGE: English
ABSTRACT: Bacterial injections into oil reservoirs may physically block rock already drained of oil. Ultramicrobacteria (UMB) may penetrate deeper into the pores and form plugs to aid oil recovery. The relative penetration profiles of UMB and full-sized Klebsiella pneumoniae were compared in model cores. Glass bead cores were sectioned after culture injection. The location of the bacteria and the glycocalyx was established by scanning electron microscopy, %%%DNA%%% measurements,
and heterotrophic activity. The full-sized cultures reduced core permeability to 1%. The highest cell number and glycocalyx were at the core inlet. However, the UMB were observed in every core section. The reduction in core permeability by UMB was dependent upon the cell injection volume and the length of the starvation regime. Further investigations include nutrient resuscitation of UMB in situ may provide a new selective plugging technique. (0 ref)
? s bupivacaine or lidocaine or prilocaine or mepivicaine or procaine

23906 BUPIVACAINE
56307 LIDOCAINE
3719 PRILOCAINE
34 MEPIVICAINE
21041 PROCAINE
S8 92689 BUPIVACAINE OR LIDOCAINE OR PRILOCAINE OR MEPIVICAINE OR
PROCAINE
? ds

Set Items Description
S1 81 PENETRATION ENHANCER
S2 1604845 DNA OR PLASMID OR POLYNUCLEOTIDE OR (NUCLEIC ACID)
S3 0 S1 AND S2
S4 2384 ENHANCE?(3N)PENETRATION
S5 48 S2 AND S4
S6 27 S5 AND PY<=1993
S7 16 RD (unique items)
S8 92689 BUPIVACAINE OR LIDOCAINE OR PRILOCAINE OR MEPIVICAINE OR P-
ROCAINE
? s s4 and s8

2384 S4
92689 S8
S9 30 S4 AND S8
? rd

...completed examining records
S10 17 RD (unique items)
? s s10 not s5

17 S10
48 S5
S11 17 S10 NOT S5
? s s11 and py<=1993

Processing
17 S11
22710852 PY<=1993
S12 10 S11 AND PY<=1993
? t s12/3,ab/1-10

12/3,AB/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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06665312 BIOSIS NO.: 000087107489
CLINICAL PHARMACOKINETICS OF CARBONATED LOCAL ANESTHETICS III. INTERSCALENE
BRACHIAL BLOCK MODEL
AUTHOR: SUKHANI R; WINNIE A P
AUTHOR ADDRESS: DIV. PEDIATR. ANESTHESIA, COOK COUNTY HOSP., 700 S. WOOD
ST., CHICAGO, ILL. 60612.
JOURNAL: ANESTH ANALG 68 (2). 1989. 90-93.
FULL JOURNAL NAME: Anesthesia and Analgesia
CODEN: AACRA
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: To compare serum levels of %%%lidocaine%%% resulting from 1.1%
%%%lidocaine%%% carbonate and 1.0% %%%lidocaine%%% hydrochloride, the two
salts were administered to ten healthy adult patients undergoing upper extremity surgery under interscalene brachial plexus block. Epinephrine (1:200,000) was added to both the solutions just prior to injection, and, following performance of the blocks, venous blood samples were drawn at 3, 5, 10, 15, 20, 30, 60 and 120 minutes. The concentration of %%%lidocaine%%% tended to rise more rapidly and to achieve higher levels
in the first 10 minutes following injection of the carbonated %%%lidocaine%%%. However, no significant differences were found in the parameters of Cmax, Tmax or AUC for the two salts, and the serum levels

in both groups at all times were well below the levels known to produce systemic toxicity. Therefore, while previous studies appear to indicate that the carbonate salt %%%enhances%%% diffusion, %%%penetration%%%, and uptake of neural tissues as compared with the hydrochloride salt, the present study indicates that vascular uptake is not similarly affected.

12/3,AB/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

06239221 BIOSIS NO.: 000086073403
PHONOPHORESIS OF LIGNOCAINE AND %%%PRILOCAINE%%% FROM EMLA CREAM
AUTHOR: BENSON H A E; MCELNAY J C; HARLAND R
AUTHOR ADDRESS: DEP. PHARM., QUEEN'S UNIV. BELFAST, MED. BIOL. CENT., 97 LISBURN ROAD, BELFAST BT9 7BL, NORTHERN IRELAND, UK.
JOURNAL: INT J PHARM (AMST) 44 (1-3). 1988. 65-70.
FULL JOURNAL NAME: International Journal of Pharmaceutics (Amsterdam)
CODEN: IJPHD
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: The influence of ultrasound on the percutaneous absorption of lignocaine and %%%prilocaine%%% from Emla cream was investigated in 11 healthy volunteer subjects in a double-blind placebo controlled cross-over clinical trial. Using a specially designed experimental protocol, the effect of both 1:1 pulsed output ultrasound (1.5 MHz and 3.0 MHz at intensity 1.0 W .cntdot. cm-2 for 5 min) and continuous output ultrasound at a range of frequencies (0.75 MHz; 1.5 MHz and 3.0 MHz, each at intensity 1.5 W .cntdot. cm-2 for 5 min) were investigated. A placebo control, involving massage without ultrasound for 5 min, was incorporated into each protocol. The pharmacodynamic parameter of loss of sensation caused by lignocaine and %%%prilocaine%%%, was used to monitor the percutaneous absorption of the drugs. A modified skin prick test, which involved pressing the blunt end of a paper clip onto the treatment site, was used. This prevented %%%enhanced%%% drug %%%penetration%%% due to trauma caused by hyperdermic needles used in the standard skin prick method. Ultrasound treatment led to an increased rate of absorption of lignocaine and/or %%%prilocaine%%% as determined by onset of anaesthesia; however, this increase was not statistically significant ($P > 0.05$; analysis of variance). Ultrasound increased the extent of absorption of lignocaine and/or %%%prilocaine%%%, as determined by duration of anaesthesia, to a statistically significant degree ($P < 0.05$; analysis of variance).

12/3,AB/3 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

05137109 BIOSIS NO.: 000081095234
EVALUATION OF %%%PENETRATION%%% %%%ENHANCEMENT%%% OF %%%LIDOCAINE%%% BY NONIONIC SURFACTANTS THROUGH HAIRLESS MOUSE SKIN IN-VITRO
AUTHOR: SARPOTDAR P P; ZATZ J L
AUTHOR ADDRESS: EASTMAN KODAK CO., KODAK PARK, ROCHESTER, N.Y. 14650, USA.
JOURNAL: J PHARM SCI 75 (2). 1986. 176-181.
FULL JOURNAL NAME: Journal of Pharmaceutical Sciences
CODEN: JPMSA
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: The effect of two nonionic surfactants (polyoxyethylene sorbitan monoesters) on percutaneous absorption of %%%lidocaine%%% in the presence of various concentrations of propylene glycol is reported. Comparisons were made in vitro using excised hairless mouse skin as the barrier membrane. Under infinite dose conditions, steady-state flux was enhanced by surfactants at high propylene glycol concentrations. The same trend was observed following application of a thin layer of formulation to the skin (finite-dose conditions). However, penetration behaviour was complex due to: (a) changes in vehicle composition following application, (b) temperature changes resulting from evaporation or moisture uptake, and (c) depletion of %%%lidocaine%%% as a result of penetration with compositions that lost water by evaporation. Two peaks in the flux versus time curve were observed. Surfactant monomer concentration in the vehicles was increased in the presence of propylene glycol.

12/3,AB/4 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

02917413 BIOSIS NO.: 000069025530
%%%PENETRATION%%% %%%ENHANCERS%%% AND OTHER FACTORS GOVERNING PER CUTANEOUS LOCAL ANESTHESIA WITH %%%LIDOCAINE%%%
AUTHOR: AKERMAN B; HAEGERSTAM G; PRING B G; SANDBERG R
AUTHOR ADDRESS: RES. DEV. LAB., ASTRA LAKEMEDEL AB, S-151 85 SODERTALJE, SWED.
JOURNAL: ACTA PHARMACOL TOXICOL 45 (1). 1979. 58-65.
FULL JOURNAL NAME: Acta Pharmacologica et Toxicologica
CODEN: APTOA
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: The percutaneous penetration of the local anesthetic %%%lidocaine%%% was studied in the guinea pig. Three different types of composition were employed: %%%lidocaine%%% hydrochloride in aqueous solution, %%%lidocaine%%% base in an aqueous alcoholic solvent mixture and %%%lidocaine%%% base in aqueous solutions of dipolar aprotic solvents. The latter solvents included simple tertiary aliphatic amides, amides related to dimethylacetamide, some cyclic amides and a number of miscellaneous compounds. The degree of dermal anesthesia was noted in each case. In addition, the uptake and distribution of %%%lidocaine%%% in the skin and its absorption into the blood were studied using 3H-labeled drug. Apparently, the percutaneous penetration of %%%lidocaine%%% is dependent on the concentration of the agent, the time of epicutaneous application of the composition, whether the agent was used as salt or free base, and the nature of the solvent medium. %%%Lidocaine%%% base in aqueous dimethylacetamide was most effective in producing percutaneous local anesthesia.

12/3,AB/5 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

05534763 EMBASE No: 1993302862
Drug delivery using buccal-adhesive systems
Smart J.D.
Drug delivery Research Unit, School Pharmacy/Biomedical Sciences, University of Portsmouth, Park Bldg., King Henry I Street,Portsmouth PO1 2DZ United Kingdom
Advanced Drug Delivery Reviews (ADV. DRUG DELIV. REV.) (Netherlands)
1993, 11/3 (253-270)
CODEN: ADDRE ISSN: 0169-409X
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

The buccal mucosa has been investigated for local drug therapy and the systemic delivery of therapeutic peptides and other drugs that are subjected to first-pass metabolism or are unstable within the rest of the gastrointestinal tract. The mucosa of the oral cavity presents a formidable barrier to drug penetration, and one method of optimising drug delivery is by the use of adhesive dosage forms. Mucosal-adhesive materials are hydrophilic macromolecules containing numerous hydrogen-bond-forming groups. They have been called 'wet' adhesives in that they require moisture to become adhesive and this may be supplied by the saliva; the latter may

also act as the dissolution medium. Various buccal-adhesive formulations have been investigated with a view to delivering drugs locally or systemically. If the buccal route is to be used for the systemic delivery of large macromolecules, then a %%%penetration%%% %%%enhancer%%% incorporated into an adhesive dosage form may be a possible approach.

12/3,AB/6 (Item 2 from file: 73)
DIALOG(R)File 73:EMBASE
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05454717 EMBASE No: 1993222816
Effect of a silicon surfactant on the biopharmaceutical properties of a semisolid W/O emulsion system
EINFLUSS EINES SILICONEMULGATORS AUF DIE BIOPHARMAZEUTISCHEN EIGENSCHAFTEN HALBFESTER W/O-EMULSIONSSYSTEME
Gasperlin M.; Smid-Korbar J.; Kristl J.
Askerceva 7,61000 Ljubljana Slovenia
Pharmazie (PHARMAZIE) (Germany) 1993, 48/6 (439-441)
CODEN: PHARA ISSN: 0031-7144
DOCUMENT TYPE: Journal; Article
LANGUAGE: GERMAN SUMMARY LANGUAGE: GERMAN; ENGLISH

The preparation of a semisolid W/O emulsion system containing the surfactant polysiloxane-polyalkylen-polyether polymer was carried out by cold emulsification. The in vitro release of the dermotherapeutically relevant drugs %%%lidocaine%%%, metronidazole and dexamethasone was determined. As reference system Wasserhaltige Wollwachsalkoholsalbe DAB 10 was employed. The release and the penetration of the drugs have been performed using a hydro- and hydro-/lipophilic membrane in the liberation chamber, respectively. The release of the drugs from the system containing the silicon surfactant was better. For that, the silicone surfactant is responsible. It has been stated that %%%penetration%%% %%%enhancers%%% (ethanol, propylene glycol, glycerol, urea, DMSO, oleilic acid in 2.5% concentration) improved the release of the drugs from the W/O system containing the silicon, surfactant. The combination oleilic acid/propylene glycol (2:3) was found preferable.

12/3,AB/7 (Item 3 from file: 73)
DIALOG(R)File 73:EMBASE
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04876262 EMBASE No: 1992016477
Delivery systems for %%%penetration%%% %%%enhancement%%% of peptide and protein drugs: Design considerations
Kompella U.B.; Lee V.H.L.
Dept. of Pharmac. Sciences, J.Stauffer Pharm. Sci. Center, Univ. of Southern California, 1985 Zonal Avenue,Los Angeles, CA 90033-1086 United States
Advanced Drug Delivery Reviews (ADV. DRUG DELIV. REV.) (Netherlands)
1992, 8/1 (115-162)
CODEN: ADDRE ISSN: 0169-409X
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

This paper discusses the challenges to be met in designing delivery systems that maximize the absorption of peptide and protein drugs from the gastrointestinal and respiratory tracts. The ideal delivery system for either route of administration is one that will release its contents only at a favorable region of absorption, where the delivery system attaches by virtue of specific interaction with surface determinants unique to that region and where the delivery system travels at a rate independent of the transitory constraints inherent of the route of administration. Such a delivery system, which is as yet unavailable, will benefit not only peptide and protein drugs, but other poorly absorbed drugs.

12/3,AB/8 (Item 4 from file: 73)
DIALOG(R)File 73:EMBASE
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04689792 EMBASE No: 1991183146
Drug delivery systems. 6. Transdermal drug delivery
Ranade V.V.
1219 Deer Trail, Libertyville, IL 60048 United States
Journal of Clinical Pharmacology (J. CLIN. PHARMACOL.) (United States)
1991, 31/5 (401-418)
CODEN: JCPCB ISSN: 0091-2700
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

Transdermal drug delivery system has been in existence for a long time. In the past, the most commonly applied systems were topically applied creams and ointments for dermatological disorders. The occurrence of systemic side-effects with some of these formulations is indicative of absorption through the skin. A number of drugs have been applied to the skin for systemic treatment. In a broad sense, the term transdermal delivery system includes all topically administered drug formulations intended to deliver the active ingredient into the general circulation. Transdermal therapeutic systems have been designed to provide controlled continuous delivery of drugs via the skin to the systemic circulation. The relative impermeability of skin is well known, and this is associated with its functions as a dual protective barrier against invasion by micro-organisms and the prevention of the loss of physiologically essential substances such as water. Elucidation of factors that contribute to this impermeability has made the use of skin as a route for controlled systemic drug delivery possible. Basically, four systems are available that allow for effective absorption of drugs across the skin. The microsealed system is a partition-controlled delivery system that contains a drug reservoir with a saturated suspension of drug in a water-miscible solvent homogeneously dispersed in a silicone elastomer matrix. A second system is the matrix-diffusion controlled system. The third and most widely used system for transdermal drug delivery is the membrane-permeation controlled system. A fourth system, recently made available, is the gradient-charged system. Additionally, advanced transdermal carriers include systems such as iontophoretic and sonophoretic systems, thermosetting gels, prodrugs, and liposomes. Many drugs have been formulated in transdermal systems, and others are being examined for the feasibility of their delivery in this manner (e.g., nicotine antihistamines, beta-blockers, calcium channel blockers, non-steroidal anti-inflammatory drugs, contraceptives, anti-arrhythmic drugs, insulin, antivirals, hormones, alpha-interferon, and cancer chemotherapeutic agents). Research also continues on various chemical %%%penetration%%% %%%enhancers%%% that may allow delivery of therapeutic substances. For example, %%%penetration%%% %%%enhancers%%% such as Azone may allow delivery of larger-sized molecules such as proteins and polypeptides.

12/3,AB/9 (Item 5 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2000 Elsevier Science B.V. All rts. reserv.

03293388 EMBASE No: 1986000965
The effect of ultrasound on the percutaneous absorption of lignocaine
McElnay J.C.; Matthews M.P.; Harland R.; McCafferty D.F.
Department of Pharmacy, The Queen's University of Belfast, Medical Biology Centre, Belfast BT9 7BL United Kingdom
British Journal of Clinical Pharmacology (BR. J. CLIN. PHARMACOL.) (United Kingdom) 1985, 20/4 (421-424)
CODEN: BCPHB
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH

The influence of ultrasound on the percutaneous absorption of lignocaine from a cream base was investigated in a double-blind cross-over trial in healthy volunteers. Mean data indicated that there was a slightly faster onset time for local anaesthesia when ultrasound was administered when compared with control values (no ultrasound). However, the differences were not statistically significant. Further controlled clinical studies are required into the effect of ultrasound on percutaneous absorption since the technique (phonophoresis) has been alleged to %%%enhance%%% percutaneous %%%penetration%%% of a number of drugs.

12/3,AB/10 (Item 6 from file: 73)
DIALOG(R)File 73:EMBASE

00587493 EMBASE No: 1976143129
The effect of a local anesthetic, %%%lidocaine%%%, on guinea pig trachealis muscle in vitro
Weiss E.B.; Anderson W.H.; O'Brien K.P.
Dept. Resp. Dis., St. Vincent Hosp., Worcester, Mass. United States
American Review of Respiratory Disease (AM. REV. RESPIR. DIS.) 1975,
112/3 (393-400)
CODEN: ARDSB
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH

The effect of %%%lidocaine%%% was studied in guinea pig trachealis muscle
by dose response reversal and protection of agonist induced contractures in a superfusion system. %%%Lidocaine%%% reversed histamine, acetylcholine,
and depolarizing hypertonic potassium contractures with the median effective doses of 2.8, 6.0, and 3.2 mg. %%%Lidocaine%%% presuperfusion shifted in a nonparallel fashion (P<0.05) the dose response of histamine, acetylcholine, depolarizing potassium, and supramaximal electrical stimulation by contact electrodes. Pretreatment with 7 x 10sup -sup 6 M atropine did not modify %%%lidocaine%%%'s inhibition of the hypertonic potassium contractions. These findings and the decrease in maximal response indicated noncompetitive antagonism. In contrast to isoproterenol, the action of %%%lidocaine%%% was not influenced by beta blockade induced by
superfusate propranolol, 1.0 mug per ml (P=0.2). %%%Lidocaine%%%'s effect
on trachealis smooth muscle was facilitated by a decrease in hydrogen ion activity from pH 6.71 to 7.90, consistent with %%%enhanced%%% %%%penetration%%% of the free base. Low bolus dose %%%lidocaine%%% induced
contractures were noted in many studies. The potency of isoproterenol in comparison to %%%lidocaine%%%, as indexed by median effective doses, was
10sup 5 greater for reversal of histamine contractures and 10sup 4 greater for acetylcholine. The data were consistent with a nonspecific, reversible antagonism on the smooth muscle cell and may involve an effect on calcium activity.
? log

09/359975
AHAG

Search Results - Record(s) 1 through 27 of 27 returned.

1. Document ID: US 5981505 A
Entry 1 of 27
File: USPT
Nov 9, 1999

US-PAT-NO: 5981505
DOCUMENT-IDENTIFIER: US 5981505 A

TITLE: Compositions and methods for delivery of genetic material

DATE-ISSUED: November 9, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Weiner; David B.	Merion	PA	N/A	N/A
Williams; William V.	Havertown	PA	N/A	N/A
Wang; Bin	Havertown	PA	N/A	N/A

US-CL-CURRENT: 514/44; 424/278.1, 514/615, 514/818

ABSTRACT:

Methods of inducing genetic material into cells of an individual and compositions and kits for practicing the same are disclosed. The methods comprise the steps of contacting cells of an individual with a polynucleotide function enhancer and administering to the cells, a nucleic acid molecule that is free of retroviral particles. The nucleic acid molecule comprises a nucleotide sequence that encodes a protein that comprises at least one epitope that is identical or substantially similar to an epitope of a pathogen antigen or an antigen associated with a hyperproliferative or autoimmune disease, a protein otherwise missing from the individual due to a missing, non-functional or partially functioning gene, or a protein that produces a therapeutic effect on an individual. Methods of prophylactically and therapeutically immunizing an individual against HIV are disclosed. Pharmaceutical compositions and kits for practicing methods of the present invention are disclosed.
75 Claims, 23 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 12

2. Document ID: US 5952480 A
Entry 2 of 27
File: USPT
Sep 14, 1999

US-PAT-NO: 5952480
DOCUMENT-IDENTIFIER: US 5952480 A

TITLE: Mammalian CDP-diacylglycerol synthase

DATE-ISSUED: September 14, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Leung; David W.	Mercer Island	WA	N/A	N/A
Weeks; Reitha	Seattle	WA	N/A	N/A

US-CL-CURRENT: 536/23.2; 435/194

ABSTRACT:

There is disclosed cDNA sequences and polypeptides having the enzyme CDP-diacylglycerol synthase (CDS) activity. CDS is also known as CTP:phosphatidate cytidylytransferase. There is further disclosed methods for isolation and production of polypeptides involved in phosphatidic acid metabolism and signaling in mammalian cells, in particular, the production of purified forms of CDS.
1 Claims, 8 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 18

3. Document ID: US 5935994 A
Entry 3 of 27
File: USPT
Aug 10, 1999

US-PAT-NO: 5935994
DOCUMENT-IDENTIFIER: US 5935994 A

TITLE: Nutritionally balanced dermal composition and method

DATE-ISSUED: August 10, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Nimni; Marcel E.	Santa Monica	CA	90405	N/A

US-CL-CURRENT: 514/458; 514/474, 514/561, 514/562

ABSTRACT:

A composition and method for enhancing the appearance of the skin, the composition containing a mixture of essential amino acids, a penetrant, a neucleotide, vitamin C and vitamin E.

6 Claims, 0 Drawing figures
Exemplary Claim Number: 1

4. Document ID: US 5821336 A
Entry 4 of 27
File: USPT
Oct 13, 1998

US-PAT-NO: 5821336
DOCUMENT-IDENTIFIER: US 5821336 A

TITLE: Cytokine which mediates inflammation

DATE-ISSUED: October 13, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Odink; Karel Gerrit	Rheinfelden	N/A	N/A	CHX
Tarcsay; Lajos	Grenzach-Wyhlen	N/A	N/A	DEX
Bruggen; Josef	Schutzengasse	N/A	N/A	CHX
Wiesendanger; Walter	Aesch	N/A	N/A	CHX
Cerletti; Nico	Bottmingen	N/A	N/A	CHX
Sorg; Clemens	Munster	N/A	N/A	DEX
DeWolf-Peeters; Christiane	Bekkevoort	N/A	N/A	BEX
Delabie; Jan	Zwingstraat	N/A	N/A	BEX

US-CL-CURRENT: 530/351; 435/252.3, 435/252.31, 435/252.34, 435/253.4, 435/254.11, 435/255.1, 435/255.2, 435/325, 435/366, 435/69.5, 435/70.1, 435/71.1, 435/71.2, 530/412, 530/416, 530/417

ABSTRACT:

The invention concerns polypeptides with an apparent molecular weight of around 160 kD which are mediators or precursors for mediators of inflammation, derivatives thereof such as mutants and fragments, processes for their preparation, DNAs and hybrid vectors coding for the polypeptides and derivatives and host cells transformed with such hybrid vectors, polyclonal and monoclonal antibodies specific for the polypeptides or their derivatives and antibody derivatives as well as diagnostic and therapeutic methods for inflammatory conditions and Hodgkin lymphomas.
11 Claims, 10 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 10

5. Document ID: US 5843708 A
Entry 5 of 27
File: USPT
Dec 1, 1998

US-PAT-NO: 5843708
DOCUMENT-IDENTIFIER: US 5843708 A

TITLE: Chimeric antibodies

DATE-ISSUED: December 1, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hardman; Norman	Riehen	N/A	N/A	CHX
Gill; Laura Lee	Riehen	N/A	N/A	CHX
de Winter; Ronald F.J.	Milton Ernest	N/A	N/A	GB2
Wagner; Kathrin	Basel	N/A	N/A	CHX
Heusser; Christoph	Bottmingen	N/A	N/A	CHX

US-CL-CURRENT: 435/69.1; 435/69.6, 530/388.1, 530/388.2, 530/388.8, 530/388.85, 530/389.7, 536/23.1, 536/23.53

ABSTRACT:

The invention relates to murine/human chimeric monoclonal antibodies with high specificity to and affinity for human carcinoembryonic antigen (CEA), derivatives thereof, processes for the preparation of these antibodies and their derivatives, DNAs coding for heavy and light chains of these antibodies, processes for the preparation of said DNAs, mammalian cell lines that produce and secrete the antibodies and processes for the preparation of said cell lines. The chimeric antibodies and their derivatives are used for clinical purposes in vitro and in vivo, especially for the diagnosis of cancer, for localization and in vivo imaging of tumors,

for therapy, e.g.
site-directed delivery of cytotoxins, and similar purposes. The invention also concerns test kits
and pharmaceutical compositions containing said chimeric monoclonal antibodies and/or derivatives
thereof.
21 Claims, 9 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 7

6. Document ID: US 5773248 A
Entry 6 of 27
File: USPT
Jun 30, 1998

US-PAT-NO: 5773248
DOCUMENT-IDENTIFIER: US 5773248 A

TITLE: Nucleic acid encoding a human .alpha.3(IX) collagen protein and method of producing the
protein recombinantly

DATE-ISSUED: June 30, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Brewton; Randolph G.	Birmingham	AL	N/A	N/A
Mayne; Richard	Vestavia Hills	AL	N/A	N/A

US-CL-CURRENT: 435/69.1; 435/252.3, 435/254.11, 435/254.2, 435/320.1, 530/356, 536/23.1

ABSTRACT:

The present invention relates to novel collagens and polynucleotide sequences encoding these
novel proteins. The present invention further relates to specific collagens and derivatives,
specifically .alpha.3(IX) collagen and recombinant trimeric type IX collagen protein.
4 Claims, 5 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 7

7. Document ID: US 5762926 A
Entry 7 of 27
File: USPT
Jun 9, 1998

US-PAT-NO: 5762926
DOCUMENT-IDENTIFIER: US 5762926 A

TITLE: Method of grafting genetically modified cells to treat defects, disease or damage of the
central nervous system

DATE-ISSUED: June 9, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gage; Fred H.	La Jolla	CA	N/A	N/A
Schinstine; Malcolm	San Diego	CA	N/A	N/A
Ray; Jasodhara	San Diego	CA	N/A	N/A
Friedmann; Theodore	La Jolla	CA	N/A	N/A
Kawaja; Michael D.	Toronto	N/A	N/A	CAX
Rosenberg; Michael B.	San Diego	CA	N/A	N/A
Wolff; Jon A.	Madison	WI	N/A	N/A

US-CL-CURRENT: 424/93.21; 435/320.1, 435/375, 435/69.1, 514/44

ABSTRACT:

Methods of genetically modifying donor cells by gene transfer for grafting into the central
nervous system to treat defective, diseased or damaged cells are disclosed. The modified donor
cells produce functional molecules that effect the recovery or improved function of cells in the
CNS. Methods and vectors for carrying out gene transfer and grafting are described.
51 Claims, 134 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 70

8. Document ID: US 5650148 A
Entry 8 of 27
File: USPT
Jul 22, 1997

US-PAT-NO: 5650148
DOCUMENT-IDENTIFIER: US 5650148 A

TITLE: Method of grafting genetically modified cells to treat defects, disease or damage of the
central nervous system

DATE-ISSUED: July 22, 1997

INVENTOR-INFORMATION:
NAME
CITY

STATE
ZIP CODE
COUNTRY

Gage; Fred H.
La Jolla
CA
N/A
N/A

Friedmann; Theodore
La Jolla
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N/A

Rosenberg; Michael B.
San Diego
CA
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Wolff; Jon A.
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Schinstine; Malcolm
San Diego
CA
N/A
N/A

Kawaja; Michael D.
Toronto
N/A
N/A
CAX

Ray; Jasodhara
San Diego
CA
N/A
N/A

US-CL-CURRENT: 424/93.2; 424/93.21, 435/948, 514/44

ABSTRACT:

Methods of genetically modifying donor cells by gene transfer for grafting into the central nervous system to treat defective, diseased or damaged cells are disclosed. The modified donor cells produce functional molecules that effect the recovery or improved function of cells in the CNS. Methods and vectors for carrying out gene transfer and grafting are described.
74 Claims, 134 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 70

9. Document ID: US 5510396 A
Entry 9 of 27
File: USPT
Apr 23, 1996

US-PAT-NO: 5510396
DOCUMENT-IDENTIFIER: US 5510396 A

TITLE: Process for producing flowable osteogenic composition containing demineralized bone particles

DATE-ISSUED: April 23, 1996

INVENTOR-INFORMATION:
NAME
CITY
STATE
ZIP CODE
COUNTRY

Prewett; Annamarie B.
Little Silver
NJ
N/A
N/A

Stikeleather; Roger C.
Doylestown
PA
N/A
N/A

US-CL-CURRENT: 523/113; 424/422, 523/114, 523/115, 623/16

ABSTRACT:

Demineralized bone particles having a median length to median thickness ratio of at least about 10:1 are incorporated in an osteogenic composition useful for repairing bone defects.
20 Claims, 0 Drawing figures
Exemplary Claim Number: 1

10. Document ID: US 5507813 A
Entry 10 of 27
File: USPT
Apr 16, 1996

US-PAT-NO: 5507813
DOCUMENT-IDENTIFIER: US 5507813 A

TITLE: Shaped materials derived from elongate bone particles

DATE-ISSUED: April 16, 1996

INVENTOR-INFORMATION:
NAME
CITY
STATE
ZIP CODE
COUNTRY

Dowd; Michael
Bordentown
NJ
N/A
N/A

Dyke; Denis G.
Long Branch
NJ
N/A
N/A

US-CL-CURRENT: 623/16; 623/11, 623/66

ABSTRACT:

Surgically implantable shaped materials, e.g., sheets, are fabricated from elongate bone particles, advantageously those that have been demineralized. The materials when applied to a bone repair site enhance or accelerate new bone ingrowth by any one of a variety of biological and/or mechanical mechanisms.
21 Claims, 0 Drawing figures
Exemplary Claim Number: 1

11. Document ID: US 5484601 A
Entry 11 of 27
File: USPT
Jan 16, 1996

US-PAT-NO: 5484601
DOCUMENT-IDENTIFIER: US 5484601 A

TITLE: Flowable demineralized bone powder composition and its use in bone repair

DATE-ISSUED: January 16, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
O'Leary; Robert K.	Spring Lake	NJ	N/A	N/A
McBrayer; Patrick A.	Yardley	PA	N/A	N/A

US-CL-CURRENT: 424/422; 424/184.1, 424/423, 424/520, 424/549, 424/562, 424/94.1, 514/772.2, 514/772.3, 514/772.6, 514/774, 514/777, 514/778, 514/781, 514/785, 514/801, 514/802

ABSTRACT:

A flowable demineralized bone powder composition is provided for use in surgical bone repair.
13 Claims, 0 Drawing figures
Exemplary Claim Number: 1

12. Document ID: US 5449678 A
Entry 12 of 27
File: USPT
Sep 12, 1995

US-PAT-NO: 5449678
DOCUMENT-IDENTIFIER: US 5449678 A

TITLE: Anti-fibrotic quinazolinone-containing compositions and methods for the use thereof

DATE-ISSUED: September 12, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Pines; Mark	Rehovot	N/A	N/A	ILX
Nagler; Arnon	Jerusalem	N/A	N/A	ILX
Slavin; Shimon	Jerusalem	N/A	N/A	ILX

US-CL-CURRENT: 514/259

ABSTRACT:

The invention provides an anti-fibrotic composition, comprising an amount a compound of formula
I: ##STR1## wherein: n=1 or 2

R.sub.1 is a member of the group consisting of hydrogen, halogen, nitro, benzo, lower alkyl,
phenyl and lower alkoxy;

R.sub.2 is a member of the group consisting of hydroxy, acetoxy, and lower alkoxy, and

R.sub.3 is a member of the group consisting of hydrogen and lower alkenoxy-carbonyl;

effective to inhibit collagen type I synthesis as active ingredient therein.
6 Claims, 28 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 10

13. Document ID: US 5439684 A
Entry 13 of 27
File: USPT
Aug 8, 1995

US-PAT-NO: 5439684
DOCUMENT-IDENTIFIER: US 5439684 A

TITLE: Shaped, swollen demineralized bone and its use in bone repair

DATE-ISSUED: August 8, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Prewett; Annamarie B.	Little Silver	NJ	N/A	N/A
Stikeleather; Roger C.	Doylestown	PA	N/A	N/A
Bogdansky; Simon	Marlboro	NJ	N/A	N/A
O'Leary; Robert K.	Spring Lake	NJ	N/A	N/A

US-CL-CURRENT: 424/422; 424/423, 424/549, 514/777, 623/16

ABSTRACT:

A shaped piece of swollen demineralized bone which can also be plasticized is provided for use in
surgical bone repair.
26 Claims, 18 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 3

14. Document ID: US 5411882 A
Entry 14 of 27
File: USPT
May 2, 1995

US-PAT-NO: 5411882
DOCUMENT-IDENTIFIER: US 5411882 A

TITLE: Cytokine which mediates inflammation

DATE-ISSUED: May 2, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Odink; Karel G.	Rheinfelden	N/A	N/A	CHX
Tarcsay; Lajos	Grenzach-Wyhlen	N/A	N/A	DEX
Bruggen; Josef	Riehen	N/A	N/A	CHX
Wiesendanger; Walter	Aesch	N/A	N/A	CHX
Cerletti; Nico	Bottmingen	N/A	N/A	CHX
Sorg; Clemens	Munster	N/A	N/A	DEX
DeWolf-Peeters; Christiane	Bekkevoort	N/A	N/A	BEX
Delabie; Jan	Marke	N/A	N/A	BEX

US-CL-CURRENT: 435/358; 435/252.33, 435/320.1, 536/23.5

ABSTRACT:

The invention concerns polypeptides with an apparent molecular weight of around 160 kD which are
mediators or precursors for mediators of inflammation, derivatives thereof such as mutants and
fragments, processes for their preparation, DNAs and hybrid vectors coding for said polypeptides
and derivatives and host cells transformed with such hybrid vectors, polyclonal and monoclonal
antibodies specific for said polypeptides or their derivatives and antibody derivatives as well
as diagnostic and therapeutic methods for inflammatory conditions and Hodgkin lymphomas.
12 Claims, 10 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 10

15. Document ID: US 5405390 A
Entry 15 of 27
File: USPT
Apr 11, 1995

US-PAT-NO: 5405390
DOCUMENT-IDENTIFIER: US 5405390 A

TITLE: Osteogenic composition and implant containing same

DATE-ISSUED: April 11, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
O'Leary; Robert K.	Spring Lake	NJ	N/A	N/A
Prewett; Annamarie B.	Little Silver	NJ	N/A	N/A

US-CL-CURRENT: 623/16

ABSTRACT:

An osteogenic composition is obtained from demineralized bone tissue.
32 Claims, 2 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 1

16. Document ID: US 5314476 A
Entry 16 of 27
File: USPT
May 24, 1994

US-PAT-NO: 5314476
DOCUMENT-IDENTIFIER: US 5314476 A

TITLE: Demineralized bone particles and flowable osteogenic composition containing same

DATE-ISSUED: May 24, 1994

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Prewett; Annamarie B.	Little Silver	NJ	N/A	N/A
Stikeleather; Roger C.	Doylestown	PA	N/A	N/A

US-CL-CURRENT: 623/16; 424/422, 424/423, 623/11, 623/18

ABSTRACT:

Demineralized bone particles having a median length to median thickness ratio of at least about
10:1 are incorporated in an osteogenic composition useful for repairing bone defects.
20 Claims, 0 Drawing figures
Exemplary Claim Number: 1

17. Document ID: US 5310759 A
Entry 17 of 27
File: USPT
May 10, 1994

US-PAT-NO: 5310759
DOCUMENT-IDENTIFIER: US 5310759 A

TITLE: Methods of protecting and preserving connective and support tissues

DATE-ISSUED: May 10, 1994

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bockman; Richard S.	Sag Harbor	NY	11963	N/A

US-CL-CURRENT: 514/573

ABSTRACT:

In this invention methods are described by which prostaglandins of the E.sub.1 class and
compounds that mimic or induce cyclic adenosine monophosphate are used to block collagenase gene
expression by cells responsible for connective and support tissue breakdown. The consequence of
using pharmaceutically acceptable preparations of prostaglandin E.sub.1, analogs of prostaglandin
E.sub.1 or cyclic adenosine monophosphate agonists or inducers of cyclic adenosine monophosphate
is to preserve and protect connective and support tissues. These methods provide new treatment
modalities useful in protecting humans and animals against connective and support tissue
degradation that occurs in aging, osteoporosis and osteoarthritis.
9 Claims, 8 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 4

18. Document ID: US 5298254 A
Entry 18 of 27
File: USPT
Mar 29, 1994

US-PAT-NO: 5298254
DOCUMENT-IDENTIFIER: US 5298254 A

TITLE: Shaped, swollen demineralized bone and its use in bone repair

DATE-ISSUED: March 29, 1994

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Prewett; Annamarie B.	Little Silver	NJ	N/A	N/A
Stikeleather; Roger C.	Doylestown	PA	N/A	N/A
Bogdansky; Simon	Marlboro	NJ	N/A	N/A
O'Leary; Robert K.	Spring Lake	NJ	N/A	N/A

US-CL-CURRENT: 424/422; 424/423, 424/549, 514/772.3, 514/777, 514/779, 514/780, 514/785, 514/801, 514/802, 514/953, 623/16

ABSTRACT:

A shaped piece of swollen demineralized bone which can also be plasticized is provided for use in
surgical bone repair.
30 Claims, 18 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 3

19. Document ID: US 5290558 A
Entry 19 of 27
File: USPT
Mar 1, 1994

US-PAT-NO: 5290558
DOCUMENT-IDENTIFIER: US 5290558 A

TITLE: Flowable demineralized bone powder composition and its use in bone repair

DATE-ISSUED: March 1, 1994

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
O'Leary; Robert K.	Spring Lake	NJ	N/A	N/A
McBrayer; Patrick A.	Yardley	PA	N/A	N/A

US-CL-CURRENT: 424/422; 424/423, 424/549, 514/772, 514/777, 623/16

ABSTRACT:

A flowable demineralized bone powder composition is provided for use in surgical bone repair.
21 Claims, 0 Drawing figures
Exemplary Claim Number: 1

20. Document ID: US 5284655 A
Entry 20 of 27
File: USPT
Feb 8, 1994

US-PAT-NO: 5284655
DOCUMENT-IDENTIFIER: US 5284655 A

TITLE: Swollen demineralized bone particles, flowable osteogenic composition containing same and
use of the composition in the repair of osseous defects

DATE-ISSUED: February 8, 1994

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bogdansky; Simon	Marlboro	NJ	N/A	N/A
O'Leary; Robert K.	Spring Lake	NJ	N/A	N/A

US-CL-CURRENT: 424/422; 424/423, 424/549, 514/777, 514/779, 514/780, 514/782, 623/16

ABSTRACT:

Swollen demineralized bone particles are formulated into a flowable osteogenic composition which
is useful in the repair of osseous defects.
18 Claims, 0 Drawing figures
Exemplary Claim Number: 1

21. Document ID: US 5250421 A
Entry 21 of 27
File: USPT
Oct 5, 1993

US-PAT-NO: 5250421
DOCUMENT-IDENTIFIER: US 5250421 A

TITLE: Method for producing factor VIII:C-type proteins

DATE-ISSUED: October 5, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kaufman; Randal J.	Boston	MA	N/A	N/A
Adamson; S. Robert	Chelmsford	MA	N/A	N/A

US-CL-CURRENT: 435/69.6; 435/320.1, 435/69.1, 930/100

ABSTRACT:

An improved method for producing Factor VIII:c-type proteins is disclosed which involves
culturing mammalian cells which are capable of expressing the protein. In accordance with this
invention the cells are cultured in a medium containing an effective amount of a substance
comprising (a) von Willebrand Factor-type protein, (b) a phospholipid or phospholipid mixture, or
a mixture of (a) and (b).
4 Claims, 0 Drawing figures
Exemplary Claim Number: 1

22. Document ID: US 5236456 A
Entry 22 of 27
File: USPT
Aug 17, 1993

US-PAT-NO: 5236456
DOCUMENT-IDENTIFIER: US 5236456 A

TITLE: Osteogenic composition and implant containing same

DATE-ISSUED: August 17, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
O'Leary; Robert K.	Spring Lake	NJ	N/A	N/A
Prewett; Annamarie B.	Little Silver	NJ	N/A	N/A

US-CL-CURRENT: 623/16; 128/DIG.8, 424/422, 623/18

ABSTRACT:

An osteogenic composition is obtained from demineralized bone tissue.
28 Claims, 2 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 1

23. Document ID: US 5198349 A
Entry 23 of 27
File: USPT
Mar 30, 1993

US-PAT-NO: 5198349
DOCUMENT-IDENTIFIER: US 5198349 A

TITLE: Method for producing factor VIII:C and analogs

DATE-ISSUED: March 30, 1993

INVENTOR-INFORMATION:
NAME | CITY | STATE | ZIP CODE | COUNTRY
Kaufman; Randal J. | Boston | MA | N/A | N/A

US-CL-CURRENT: 435/69.6; 435/320.1, 435/358, 435/464, 435/465, 435/69.1, 435/948, 530/380, 530/381, 530/383, 930/100

ABSTRACT:

An improved method for producing Factor VIII:c is disclosed. The method involves culturing mammalian cells which contain DNA encoding Factor VIII:c and which are capable of expressing Factor VIII:c. In accordance with this invention the cells are cultured in a medium containing an effective amount of a Factor VIII:c-stabilizing substance comprising (a) von Willebrand Factor (VWF), (b) a phospholipid or phospholipid mixture, or a mixture of (a) and (b).
6 Claims, 8 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 8

24. Document ID: US 5073373 A
Entry 24 of 27 | File: USPT | Dec 17, 1991

US-PAT-NO: 5073373
DOCUMENT-IDENTIFIER: US 5073373 A

TITLE: Flowable demineralized bone powder composition and its use in bone repair

DATE-ISSUED: December 17, 1991

INVENTOR-INFORMATION:
NAME | CITY | STATE | ZIP CODE | COUNTRY
O'Leary; Robert K. | Spring Lake | NJ | N/A | N/A
McBrayer; Patrick A. | Yardley | PA | N/A | N/A

US-CL-CURRENT: 424/422; 424/423, 424/549, 424/94.1, 514/785, 514/801, 514/802, 623/16

ABSTRACT:

A flowable demineralized bone powder composition is provided for use in surgical bone repair.
14 Claims, 0 Drawing figures
Exemplary Claim Number: 1

25. Document ID: US 5061286 A
Entry 25 of 27 | File: USPT | Oct 29, 1991

US-PAT-NO: 5061286
DOCUMENT-IDENTIFIER: US 5061286 A

TITLE: Osteoprosthetic implant

DATE-ISSUED: October 29, 1991

INVENTOR-INFORMATION:
NAME | CITY | STATE | ZIP CODE | COUNTRY
Lyle; John W. | Belmar | NJ | N/A | N/A

US-CL-CURRENT: 623/16; 623/23, 623/66

ABSTRACT:

At least a portion of the surface of an osteoprosthetic implant is provided with demineralized bone powder adhering thereto. Sorption of the bone particles is accompanied by rapid and deep bone in-growth which firmly anchors the prosthesis to the host bone repair site.
19 Claims, 5 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 1

26. Document ID: AU 9876997 A, WO 9854322 A1
Entry 26 of 27 | File: DWPI | Dec 30, 1998

DERWENT-ACC-NO: 1999-059837
DERWENT-WEEK: 199918

TITLE: New nucleic acid expressing the osteoblast-specific transcription factor Osf2 - useful for, e.g. treatment of osteogenic diseases, in vaccines and for diagnosis
INVENTOR: DUCY, P; KARSENTY, G

PRIORITY-DATA:
1998US-0080189 | March 24, 1998
1997US-0048430 | May 29, 1997

PATENT-FAMILY:
PUB-NO | PUB-DATE | LANGUAGE | PAGES | MAIN-IPC
AU 9876997 A | December 30, 1998 | N/A | 000 | C12N015/12
WO 9854322 A1 | December 3, 1998 | E

INT-CL (IPC): A01K 67/027; A61K 31/70; A61K 38/17; A61K 48/00; C07K 14/47; C07K 16/18 ; C12N 1/21; C12N 5/10; C12N 7/01; C12N 15/12; C12N 15/86; C12Q 1/68; G01N 33/53

ABSTRACTED-PUB-NO: WO 9854322A
BASIC-ABSTRACT:

New nucleic acid (I) of 600-10000 nucleotides (nt) that hybridises specifically to sequences of 3334 bp (S1) or 2294 bp (S2) (given in the specification), or their complements, are new. Also new are: (A) recombinant vector containing (I); (B) host cells containing this vector; (C) virus containing (I); (D) isolated polypeptides (II) of 596 amino acids (aa) (S3), or 548 aa (S4); (E) antibodies (Ab) that bind specifically to (II); (F) transgenic non-human animals including in their genomes a transgene that encodes (II), and (G) method for identifying a gene (III) encoding a polypeptide that interacts with the OSE2 sequence element (a known cis-acting element in the osteocalcin promoter).

USE - Cells of (B) are used to produce recombinant (II), designated Osf2/Cbfa1 and having osteoblast-specific transcriptional activity (particularly for treating osteogenic diseases, optionally when expressed from a gene therapy vector). (II) is also used to raise Ab; to screen for modulators of (II) activity; in vaccines and to detect specific antibodies (e.g. for diagnosis of bacterial infections). (I) can be used to produce transgenic animals or pluripotent non-human animal cells, while their fragments are used to detect Osf2/Cbfa1 genes by hybridisation, or as antisense molecules or ribozymes for downregulation of gene expression. Also (I), (II) or viruses of (C) are used for specific transcription of osteoblast-specific genes that have an OSE2 sequence element; to generate an immune response; in binding assays to detect OSE2 elements; for purification of such elements and to induce differentiation of osteoplast progenitors for stimulating formation, growth, replacement and repair of bone tissue. Ab, optionally, labelled, are used as immunoassay reagents for detecting (II); in DNA-binding assays to identify other genes to which (II) can bind; for affinity purification of (II) and to clone related genes. Also regulatory sequences (promoter and enhancer) from (I) are used to provide osteoblast-specific expression of homologous or heterologous genes, e.g. osteocalcin, type I collagen, osteopontin and bone sialoprotein.

27. Document ID: AU 708511 B, WO 9603051 A1, AU 9532047 A, EP 772404 A1, JP 10504715 W, KR 97704874 A, NZ 291042 A
Entry 27 of 27
File: DWPI
Aug 5, 1999

DERWENT-ACC-NO: 1996-116711
DERWENT-WEEK: 199943

TITLE: Transgenic non-human mammals capable of secreting exogenous (pro)collagen into their milk - are healthy and capable of producing (pro)collagen at high levels, usually in trimeric form

INVENTOR: BERG, R A; DE WIT, I ; KARATZAS, C N ; PIEPER, F ; PLATENBURG, G ; TOMAN, P D

PRIORITY-DATA:
1995US-0482173
June 7, 1995
1994US-0281493
July 27, 1994

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
AU 708511 B	August 5, 1999	N/A	000	A23C009/00
WO 9603051 A1	February 8, 1996	E	088	A23C009/00
AU 9532047 A	February 22, 1996	N/A	000	A23C009/00
EP 772404 A1	May 14, 1997	E	000	A23C009/00
JP 10504715 W	May 12, 1998	N/A	082	A01K067/027
KR 97704874 A	September 6, 1997	N/A	000	C12N015/00
NZ 291042 A	December 23, 1998	N/A	000	A01K067/027

INT-CL (IPC): A01K 67/027; A23C 9/00; A23J 1/00; A23J 1/20; C07H 15/00; C07K 1/00; C07K 17/00; C12N 5/00; C12N 5/10; C12N 5/14; C12N 15/00; C12N 15/09; C12N 15/12; C12P 21/06

ABSTRACTED-PUB-NO: WO 9603051A
BASIC-ABSTRACT:

A novel transgenic nonhuman mammal (A) has a transgene (TG), which comprises: (i) a mammary gland specific promoter; (ii) a mammary gland specific enhancer; (iii) a secretory DNA segment (I) encoding a signal peptide functional in mammary secretory cells (MSC) of (A); and (iv) a recombinant DNA segment encoding an exogenous procollagen polypeptide (PP) operably linked to (I) which is operably linked to (i) and (ii), where the TG in an adult form of (A) is capable of expressing the secretory-recombinant DNA segment in the MSC to produce a form of the exogenous PP that is processed and secreted by the MSC into milk as exogenous procollagen or collagen.

USE - The transgenic nonhuman mammals are useful for the prodn. of PP/C esp. secreted into their

milk (claimed). The collagen produced is used in therapeutics, esp. in reconstructive and
cosmetic procedures.

ADVANTAGE - The transgenic nonhuman mammals are able to produce viable and correctly synthesised
and assembled collagen in their milk. The transgenic are healthy and secondary expression of
collagen in other tissues is avoided.

Term

Documents

3 SAME 2 SAME 1

27

including document number

Display Format: